

ANNEX I

**LIST OF THE NAMES, PHARMACEUTICAL FORMS, STRENGTHS OF THE MEDICINAL
PRODUCTS, ROUTE OF ADMINISTRATION AND MARKETING AUTHORISATION HOLDERS
IN THE MEMBER STATES**

| <u>Member State EU/EEA</u> | <u>Marketing Authorisation Holder</u> | <u>Invented name</u> | <u>Strength</u> | <u>Pharmaceutical Form</u> | <u>Route of administration</u> |
|----------------------------|--|----------------------------------|-----------------|----------------------------|--------------------------------|
| Austria | Novartis Pharma GmbH Stella-Klein-Löw-Weg 17 A-1020 Wien (Tel: + 43-1-8665 70) | Diovan 40 mg Filmtabletten | 40 mg | film-coated tablets | Oral Use |
| Austria | Novartis Pharma GmbH Stella-Klein-Löw-Weg 17 A-1020 Wien (Tel: + 43-1-8665 70) | Angiosan 40 mg Filmtabletten | 40 mg | film-coated tablets | Oral Use |
| Austria | Novartis Pharma GmbH Stella-Klein-Löw-Weg 17 A-1020 Wien (Tel: + 43-1-8665 70) | Diovan 80 mg Filmtabletten | 80 mg | film-coated tablets | Oral Use |
| Austria | Novartis Pharma GmbH Stella-Klein-Löw-Weg 17 A-1020 Wien (Tel: + 43-1-8665 70) | Angiosan 80 mg Filmtabletten | 80 mg | film-coated tablets | Oral Use |
| Austria | Novartis Pharma GmbH Stella-Klein-Löw-Weg 17 A-1020 Wien (Tel: + 43-1-8665 70) | Diovan 160 mg Filmtabletten | 160 mg | film-coated tablets | Oral Use |
| Austria | Novartis Pharma GmbH Stella-Klein-Löw-Weg 17 A-1020 Wien (Tel: + 43-1-8665 70) | Angiosan 160 mg Filmtabletten | 160 mg | film-coated tablets | Oral Use |
| Austria | Novartis Pharma GmbH Stella-Klein-Löw-Weg 17 A-1020 Wien (Tel: + 43-1-8665 70) | Diovan 320 mg Filmtabletten | 320 mg | film-coated tablets | Oral Use |
| Austria | Novartis Pharma GmbH Stella-Klein-Löw-Weg 17 A-1020 Wien (Tel: + 43-1-8665 70) | Angiosan 320 mg Filmtabletten | 320 mg | film-coated tablets | Oral Use |

| <u>Member State EU/EEA</u> | <u>Marketing Authorisation Holder</u> | <u>Invented name</u> | <u>Strength</u> | <u>Pharmaceutical Form</u> | <u>Route of administration</u> |
|----------------------------|--|----------------------|-----------------|----------------------------|--------------------------------|
| Belgium | N.V. Novartis Pharma S.A. Medialaan 40, bus 1 B-1800 Vilvoorde (Tel: +32-2-246 16 11) | Diovane 40 mg | 40 mg | film-coated tablets | Oral Use |
| Belgium | N.V. Novartis Pharma S.A. Medialaan 40, bus 1 B-1800 Vilvoorde (Tel: +32-2-246 16 11) | Diovane 80 mg | 80 mg | film-coated tablets | Oral Use |
| Belgium | N.V. Novartis Pharma S.A. Medialaan 40, bus 1 B-1800 Vilvoorde (Tel: +32-2-246 16 11) | Diovane 160 mg | 160 mg | film-coated tablets | Oral Use |
| Belgium | N.V. Novartis Pharma S.A. Medialaan 40, bus 1 B-1800 Vilvoorde (Tel: +32-2-246 16 11) | Diovane 320 mg | 320 mg | film-coated tablets | Oral Use |
| Bulgaria | Novartis Pharma GmbH Roonstrasse 25 D-90429 Nürnberg (Tel: +49-911-273-0) | Diovan 40 mg | 40 mg | film-coated tablets | Oral Use |
| Bulgaria | Novartis Pharma GmbH Roonstrasse 25 D-90429 Nürnberg (Tel: +49-911-273-0) | Diovan 80 mg | 80 mg | film-coated tablets | Oral Use |
| Bulgaria | Novartis Pharma GmbH Roonstrasse 25 D-90429 Nürnberg (Tel: +49-911-273-0) | Diovan 160 mg | 160 mg | film-coated tablets | Oral Use |
| Bulgaria | Novartis Pharma GmbH Roonstrasse 25 D-90429 Nürnberg (Tel: +49-911-273-0) | Diovan 320 mg | 320 mg | film-coated tablets | Oral Use |

| <u>Member State EU/EEA</u> | <u>Marketing Authorisation Holder</u> | <u>Invented name</u> | <u>Strength</u> | <u>Pharmaceutical Form</u> | <u>Route of administration</u> |
|----------------------------|---|----------------------|-----------------|----------------------------|--------------------------------|
| Cyprus | Novartis Pharmaceuticals UK Ltd Frimley Business Park Frimley, Camberley Surrey GU16 7SR United Kingdom (Tel: +44-1276-69 22 55) | Diovan 40 mg | 40 mg | film-coated tablets | Oral Use |
| Cyprus | Novartis Pharmaceuticals UK Ltd Frimley Business Park Frimley, Camberley Surrey GU16 7SR United Kingdom (Tel: +44-1276-69 22 55) | Diovan 80 mg | 80 mg | film-coated tablets | Oral Use |
| Cyprus | Novartis Pharmaceuticals UK Ltd Frimley Business Park Frimley, Camberley Surrey GU16 7SR United Kingdom (Tel: +44-1276-69 22 55) | Diovan 160 mg | 160 mg | film-coated tablets | Oral Use |
| Cyprus | Novartis Pharmaceuticals UK Ltd Frimley Business Park Frimley, Camberley Surrey GU16 7SR United Kingdom (Tel: +44-1276-69 22 55) | Diovan 320 mg | 320 mg | film-coated tablets | Oral Use |
| Czech Republic | NOVARTIS s.r.o. Pharma Nagano III. U Nákladového nádraží 10 130 00 Praha 3 (Tel +420-2-2577 51 11) | Diovan 40 mg | 40 mg | film-coated tablets | Oral Use |

| <u>Member State EU/EEA</u> | <u>Marketing Authorisation Holder</u> | <u>Invented name</u> | <u>Strength</u> | <u>Pharmaceutical Form</u> | <u>Route of administration</u> |
|----------------------------|--|----------------------|-----------------|----------------------------|--------------------------------|
| Czech Republic | NOVARTIS s.r.o. Pharma Nagano III. U Nákladového nádraží 10 130 00 Praha 3 (Tel +420-2-2577 51 11) | Diovan 160 mg | 160 mg | film-coated tablets | Oral Use |
| Denmark | Novartis Healthcare A/S Lyngbyvej 172 DK-2100 København Ø (Tel: +45-39-16 84 00) | Diovan 40 mg | 40 mg | film-coated tablets | Oral Use |
| Denmark | Novartis Healthcare A/S Lyngbyvej 172 DK-2100 København Ø (Tel: +45-39-16 84 00) | Diovan 80 mg | 80 mg | film-coated tablets | Oral Use |
| Denmark | Novartis Healthcare A/S Lyngbyvej 172 DK-2100 København Ø (Tel: +45-39-16 84 00) | Diovan 160 mg | 160 mg | film-coated tablets | Oral Use |
| Denmark | Novartis Healthcare A/S Lyngbyvej 172 DK-2100 København Ø (Tel: +45-39-16 84 00) | Diovan 320 mg | 320 mg | film-coated tablets | Oral Use |
| Estonia | Novartis Finland OY Metsänneidonkuja 10 FIN-02130 Espoo (Tel: + 358-9-6133 22 11) | Diovan | 40 mg | film-coated tablets | Oral Use |
| Estonia | Novartis Finland OY Metsänneidonkuja 10 FIN-02130 Espoo (Tel: + 358-9-6133 22 11) | Diovan | 80 mg | film-coated tablets | Oral Use |
| Estonia | Novartis Finland OY Metsänneidonkuja 10 FIN-02130 Espoo (Tel: + 358-9-6133 22 11) | Diovan | 160 mg | film-coated tablets | Oral Use |

| <u>Member State EU/EEA</u> | <u>Marketing Authorisation Holder</u> | <u>Invented name</u> | <u>Strength</u> | <u>Pharmaceutical Form</u> | <u>Route of administration</u> |
|----------------------------|---|----------------------|-----------------|----------------------------|--------------------------------|
| Estonia | Novartis Finland OY Metsänneidonkuja 10 FIN-02130 Espoo (Tel: + 358-9-6133 22 11) | Diovan | 320 mg | film-coated tablets | Oral Use |
| Finland | Novartis Finland Oy Metsänneidonkuja 10 FIN-02130 Espoo (Tel: + 358-9-6133 22 11) | Diovan 40 mg | 40 mg | film-coated tablets | Oral Use |
| Finland | Novartis Finland Oy Metsänneidonkuja 10 FIN-02130 Espoo (Tel: + 358-9-6133 22 11) | Diovan 80 mg | 80 mg | film-coated tablets | Oral Use |
| Finland | Novartis Finland Oy Metsänneidonkuja 10 FIN-02130 Espoo (Tel: + 358-9-6133 22 11) | Diovan 160 mg | 160 mg | film-coated tablets | Oral Use |
| Finland | Novartis Finland Oy Metsänneidonkuja 10 FIN-02130 Espoo (Tel: + 358-9-6133 22 11) | Diovan 320 mg | 320 mg | film-coated tablets | Oral Use |
| France | Novartis Pharma S.A.S. 2 and 4, rue Lionel Terray 92500 RUEIL-MALMAISON France (Tel: +33-1-5547 60 00) | Tareg 40 mg | 40 mg | film-coated tablets | Oral Use |
| France | Novartis Pharma S.A.S. 2 and 4, rue Lionel Terray 92500 RUEIL-MALMAISON France (Tel: +33-1-5547 60 00) | Tareg 80 mg | 80 mg | film-coated tablets | Oral Use |

| <u>Member State EU/EEA</u> | <u>Marketing Authorisation Holder</u> | <u>Invented name</u> | <u>Strength</u> | <u>Pharmaceutical Form</u> | <u>Route of administration</u> |
|----------------------------|---|--------------------------|-----------------|----------------------------|--------------------------------|
| France | Novartis Pharma S.A.S. 2 and 4, rue Lionel Terray 92500 RUEIL-MALMAISON France (Tel: +33-1-5547 60 00) | Tareg 160 mg | 160 mg | film-coated tablets | Oral Use |
| Germany | Novartis Pharma GmbH Roonstrasse 25 D-90429 Nürnberg (Tel: +49-911-273-0) | Diovan 40 mg | 40 mg | film-coated tablets | Oral Use |
| Germany | Novartis Pharma GmbH Roonstrasse 25 D-90429 Nürnberg (Tel: +49-911-273-0) | Cordinate 40 mg | 40 mg | film-coated tablets | Oral Use |
| Germany | Novartis Pharma GmbH Roonstrasse 25 D-90429 Nürnberg (Tel: +49-911-273-0) | Provas 40 mg | 40 mg | film-coated tablets | Oral Use |
| Germany | Novartis Pharma GmbH Roonstrasse 25 D-90429 Nürnberg (Tel: +49-911-273-0) | Diovan 80 mg | 80 mg | film-coated tablets | Oral Use |
| Germany | Novartis Pharma GmbH Roonstrasse 25 D-90429 Nürnberg (Tel: +49-911-273-0) | Cordinate 80 mg | 80 mg | film-coated tablets | Oral Use |
| Germany | Novartis Pharma GmbH Roonstrasse 25 D-90429 Nürnberg (Tel: +49-911-273-0) | Provas 80 mg | 80 mg | film-coated tablets | Oral Use |
| Germany | Novartis Pharma GmbH Roonstrasse 25 D-90429 Nürnberg (Tel: +49-911-273-0) | Diovan 160 mg protect | 160 mg | film-coated tablets | Oral Use |

| <u>Member State EU/EEA</u> | <u>Marketing Authorisation Holder</u> | <u>Invented name</u> | <u>Strength</u> | <u>Pharmaceutical Form</u> | <u>Route of administration</u> |
|----------------------------|--|------------------------|-----------------|----------------------------|--------------------------------|
| Germany | Novartis Pharma GmbH Roonstrasse 25 D-90429 Nürnberg (Tel: +49-911-273-0) | Cordinate 160 mg | 160 mg | film-coated tablets | Oral Use |
| Germany | Novartis Pharma GmbH Roonstrasse 25 D-90429 Nürnberg (Tel: +49-911-273-0) | Provas 160 mg | 160 mg | film-coated tablets | Oral Use |
| Germany | Novartis Pharma GmbH Roonstrasse 25 D-90429 Nürnberg (Tel: +49-911-273-0) | Diovan 320 mg forte | 320 mg | film-coated tablets | Oral Use |
| Germany | Novartis Pharma GmbH Roonstrasse 25 D-90429 Nürnberg (Tel: +49-911-273-0) | Cordinate 320 mg | 320 mg | film-coated tablets | Oral Use |
| Germany | Novartis Pharma GmbH Roonstrasse 25 D-90429 Nürnberg (Tel: +49-911-273-0) | Provas 320 mg | 320 mg | film-coated tablets | Oral Use |
| Greece | Novartis (Hellas) S.A.C.I. National Road No. 1 (12th Km) Metamorphosis GR-144 51 Athens (Tel: +30-210-281 17 12) | Diovan 40 mg | 40 mg | film-coated tablets | Oral Use |
| Greece | Novartis (Hellas) S.A.C.I. National Road No. 1 (12th Km) Metamorphosis GR-144 51 Athens (Tel: +30-210-281 17 12) | Dalзад 40 mg | 40 mg | film-coated tablets | Oral Use |

| <u>Member State EU/EEA</u> | <u>Marketing Authorisation Holder</u> | <u>Invented name</u> | <u>Strength</u> | <u>Pharmaceutical Form</u> | <u>Route of administration</u> |
|----------------------------|--|----------------------|-----------------|----------------------------|--------------------------------|
| Greece | Novartis (Hellas) S.A.C.I. National Road No. 1 (12th Km) Metamorphosis GR-144 51 Athens (Tel: +30-210-281 17 12) | Diovan 80 mg | 80 mg | film-coated tablets | Oral Use |
| Greece | Novartis (Hellas) S.A.C.I. National Road No. 1 (12th Km) Metamorphosis GR-144 51 Athens (Tel: +30-210-281 17 12) | Dalzad 80 mg | 80 mg | film-coated tablets | Oral Use |
| Greece | Novartis (Hellas) S.A.C.I. National Road No. 1 (12th Km) Metamorphosis GR-144 51 Athens (Tel: +30-210-281 17 12) | Diovan 160 mg | 160 mg | film-coated tablets | Oral Use |
| Greece | Novartis (Hellas) S.A.C.I. National Road No. 1 (12th Km) Metamorphosis GR-144 51 Athens (Tel: +30-210-281 17 12) | Dalzad 160 mg | 160 mg | film-coated tablets | Oral Use |
| Greece | Novartis (Hellas) S.A.C.I. National Road No. 1 (12th Km) Metamorphosis GR-144 51 Athens (Tel: +30-210-281 17 12) | Diovan 320 mg | 320 mg | film-coated tablets | Oral Use |
| Greece | Novartis (Hellas) S.A.C.I. National Road No. 1 (12th Km) Metamorphosis GR-144 51 Athens (Tel: +30-210-281 17 12) | Dalzad 320 mg | 320 mg | film-coated tablets | Oral Use |

| <u>Member State EU/EEA</u> | <u>Marketing Authorisation Holder</u> | <u>Invented name</u> | <u>Strength</u> | <u>Pharmaceutical Form</u> | <u>Route of administration</u> |
|----------------------------|--|----------------------|-----------------|----------------------------|--------------------------------|
| Hungary | Novartis Hungaria Kft. Bartók Béla út 43-47 H-1114 Budapest (Tel: +36-1-457 65 00) | Diovan 40 mg | 40 mg | film-coated tablets | Oral Use |
| Hungary | Novartis Hungaria Kft. Bartók Béla út 43-47 H-1114 Budapest (Tel: +36-1-457 65 00) | Diovan 80 mg | 80 mg | film-coated tablets | Oral Use |
| Hungary | Novartis Hungaria Kft. Bartók Béla út 43-47 H-1114 Budapest (Tel: +36-1-457 65 00) | Diovan 160 mg | 160 mg | film-coated tablets | Oral Use |
| Hungary | Novartis Hungaria Kft. Bartók Béla út 43-47 H-1114 Budapest (Tel: +36-1-457 65 00) | Diovan 320 mg | 320 mg | film-coated tablets | Oral Use |
| Iceland | Novartis Healthcare A/S Lyngbyvej 172 DK-2100 København Ø (Tel: +45-39-16 84 00) | Diovan 40 mg | 40 mg | film-coated tablets | Oral Use |
| Iceland | Novartis Healthcare A/S Lyngbyvej 172 DK-2100 København Ø (Tel: +45-39-16 84 00) | Diovan 80 mg | 80 mg | film-coated tablets | Oral Use |
| Iceland | Novartis Healthcare A/S Lyngbyvej 172 DK-2100 København Ø (Tel: +45-39-16 84 00) | Diovan 160 mg | 160 mg | film-coated tablets | Oral Use |
| Iceland | Novartis Healthcare A/S Lyngbyvej 172 DK-2100 København Ø (Tel: +45-39-16 84 00) | Diovan 320 mg | 320 mg | film-coated tablets | Oral Use |

| <u>Member State EU/EEA</u> | <u>Marketing Authorisation Holder</u> | <u>Invented name</u> | <u>Strength</u> | <u>Pharmaceutical Form</u> | <u>Route of administration</u> |
|----------------------------|---|----------------------|-----------------|----------------------------|--------------------------------|
| Ireland | Novartis Pharmaceuticals UK Ltd Frimley Business Park Frimley, Camberley Surrey GU16 7SR United Kingdom (Tel: +44-1276-69 22 55) | Diovan 40 mg | 40 mg | film-coated tablets | Oral Use |
| Ireland | Novartis Pharmaceuticals UK Ltd Frimley Business Park Frimley, Camberley Surrey GU16 7SR United Kingdom (Tel: +44-1276-69 22 55) | Diovan 80 mg | 80 mg | film-coated tablets | Oral Use |
| Ireland | Novartis Pharmaceuticals UK Ltd Frimley Business Park Frimley, Camberley Surrey GU16 7SR United Kingdom (Tel: +44-1276-69 22 55) | Diovan 160 mg | 160 mg | film-coated tablets | Oral Use |
| Ireland | Novartis Pharmaceuticals UK Ltd Frimley Business Park Frimley, Camberley Surrey GU16 7SR United Kingdom (Tel: +44-1276-69 22 55) | Diovan 320 mg | 320 mg | film-coated tablets | Oral Use |
| Italy | Novartis Farma S.p.A. Largo Umberto Boccioni 1 I-21040 Origgio (Tel: + 39-02-96542214) | Tareg 40 mg | 40 mg | film-coated tablets | Oral Use |
| Italy | Novartis Farma S.p.A. Largo Umberto Boccioni 1 I-21040 Origgio (Tel: + 39-02-96542214) | Rixil 40 mg | 40 mg | film-coated tablets | Oral Use |

| <u>Member State EU/EEA</u> | <u>Marketing Authorisation Holder</u> | <u>Invented name</u> | <u>Strength</u> | <u>Pharmaceutical Form</u> | <u>Route of administration</u> |
|----------------------------|---|----------------------|-----------------|----------------------------|--------------------------------|
| Italy | Novartis Farma S.p.A. Largo Umberto Boccioni 1 I-21040 Origgio (Tel: + 39-02-96542214) | Tareg 80 mg | 80 mg | film-coated tablets | Oral Use |
| Italy | Novartis Farma S.p.A. Largo Umberto Boccioni 1 I-21040 Origgio (Tel: + 39-02-96542214) | Rixil 80 mg | 80 mg | film-coated tablets | Oral Use |
| Italy | Novartis Farma S.p.A. Largo Umberto Boccioni 1 I-21040 Origgio (Tel: + 39-02-96542214) | Tareg 160 mg | 160 mg | film-coated tablets | Oral Use |
| Italy | Novartis Farma S.p.A. Largo Umberto Boccioni 1 I-21040 Origgio (Tel: + 39-02-96542214) | Rixil 160 mg | 160 mg | film-coated tablets | Oral Use |
| Italy | Novartis Farma S.p.A. Largo Umberto Boccioni 1 I-21040 Origgio (Tel: + 39-02-96542214) | Tareg 320 mg | 320 mg | film-coated tablets | Oral Use |
| Italy | Novartis Farma S.p.A. Largo Umberto Boccioni 1 I-21040 Origgio (Tel: + 39-02-96542214) | Rixil 320 mg | 320 mg | film-coated tablets | Oral Use |
| Latvia | Novartis Finland OY Metsänneidonkuja 10 FIN-02130 Espoo (Tel: + 358-9-6133 22 11) | Diovan 40 mg | 40 mg | film-coated tablets | Oral Use |
| Latvia | Novartis Finland OY Metsänneidonkuja 10 FIN-02130 Espoo (Tel: + 358-9-6133 22 11) | Diovan 80 mg | 80 mg | film-coated tablets | Oral Use |

| <u>Member State EU/EEA</u> | <u>Marketing Authorisation Holder</u> | <u>Invented name</u> | <u>Strength</u> | <u>Pharmaceutical Form</u> | <u>Route of administration</u> |
|----------------------------|--|--|-----------------|----------------------------|--------------------------------|
| Latvia | Novartis Finland OY Metsänneidonkuja 10 FIN-02130 Espoo (Tel: + 358-9-6133 22 11) | Diovan 160 mg | 160 mg | film-coated tablets | Oral Use |
| Latvia | Novartis Finland OY Metsänneidonkuja 10 FIN-02130 Espoo (Tel: + 358-9-6133 22 11) | Diovan 320 mg | 320 mg | film-coated tablets | Oral Use |
| Lithuania | Novartis Finland Oy Metsänneidonkuja 10 FIN-02130 Espoo (Tel: + 358-9-6133 22 11) | Diovan 80 mg plėvele dengtos tabletės | 80 mg | film-coated tablets | Oral Use |
| Lithuania | Novartis Finland Oy Metsänneidonkuja 10 FIN-02130 Espoo (Tel: + 358-9-6133 22 11) | Diovan 160 mg plėvele dengtos tabletės | 160 mg | film-coated tablets | Oral Use |
| Lithuania | Novartis Finland Oy Metsänneidonkuja 10 FIN-02130 Espoo (Tel: + 358-9-6133 22 11) | Diovan 320 mg plėvele dengtos tabletės | 320 mg | film-coated tablets | Oral Use |
| Luxembourg | Novartis Pharma GmbH Roonstrasse 25 D-90429 Nürnberg (Tel: +49-911-273-0) | Diovan 40 mg | 40 mg | film-coated tablets | Oral Use |
| Luxembourg | Novartis Pharma GmbH Roonstrasse 25 D-90429 Nürnberg (Tel: +49-911-273-0) | Diovan 80 mg | 80 mg | film-coated tablets | Oral Use |
| Luxembourg | Novartis Pharma GmbH Roonstrasse 25 D-90429 Nürnberg (Tel: +49-911-273-0) | Diovan 160 mg | 160 mg | film-coated tablets | Oral Use |

| <u>Member State EU/EEA</u> | <u>Marketing Authorisation Holder</u> | <u>Invented name</u> | <u>Strength</u> | <u>Pharmaceutical Form</u> | <u>Route of administration</u> |
|----------------------------|---|----------------------|-----------------|----------------------------|--------------------------------|
| Luxembourg | Novartis Pharma GmbH Roonstrasse 25 D-90429 Nürnberg (Tel: +49-911-273-0) | Diovan 320 mg | 320 mg | film-coated tablets | Oral Use |
| Malta | Novartis Pharmaceuticals UK Ltd Frimley Business Park Frimley, Camberley Surrey GU16 7SR United Kingdom (Tel: +44-1276-69 22 55) | Diovan 40 mg | 40 mg | film-coated tablets | Oral Use |
| Malta | Novartis Pharmaceuticals UK Ltd Frimley Business Park Frimley, Camberley Surrey GU16 7SR United Kingdom (Tel: +44-1276-69 22 55) | Diovan 80 mg | 80 mg | film-coated tablets | Oral Use |
| Malta | Novartis Pharmaceuticals UK Ltd Frimley Business Park Frimley, Camberley Surrey GU16 7SR United Kingdom (Tel: +44-1276-69 22 55) | Diovan 160 mg | 160 mg | film-coated tablets | Oral Use |
| Malta | Novartis Pharmaceuticals UK Ltd Frimley Business Park Frimley, Camberley Surrey GU16 7SR United Kingdom (Tel: +44-1276-69 22 55) | Diovan 320 mg | 320 mg | film-coated tablets | Oral Use |
| Netherlands | Novartis Pharma B.V. Postbus 241 NL-6824 DP Arnhem (Tel: + 31-26-378 21 00) | Diovan 40 | 40 mg | film-coated tablets | Oral Use |

| <u>Member State EU/EEA</u> | <u>Marketing Authorisation Holder</u> | <u>Invented name</u> | <u>Strength</u> | <u>Pharmaceutical Form</u> | <u>Route of administration</u> |
|----------------------------|--|----------------------|-----------------|----------------------------|--------------------------------|
| Netherlands | Novartis Pharma B.V. Postbus 241 NL-6800 LZ Arnhem (Tel: + 31-26-378 21 00) | Diovan 80 | 80 mg | film-coated tablets | Oral Use |
| Netherlands | Novartis Pharma B.V. Postbus 241 NL-6824 DP Arnhem (Tel: + 31-26-378 21 00) | Diovan 160 | 160 mg | film-coated tablets | Oral Use |
| Netherlands | Novartis Pharma B.V. Postbus 241 NL-6824 DP Arnhem (Tel: + 31-26-378 21 00) | Diovan 320 | 320 mg | film-coated tablets | Oral Use |
| Norway | Novartis Norge AS Brynsalléen 4 Postboks 237 Økern NO-0510 Oslo (Tel: +47-2305 20 00) | Diovan 40 mg | 40 mg | film-coated tablets | Oral Use |
| Norway | Novartis Norge AS Brynsalléen 4 Postboks 237 Økern NO-0510 Oslo (Tel: +47-2305 20 00) | Diovan 80 mg | 80 mg | film-coated tablets | Oral Use |
| Norway | Novartis Norge AS Brynsalléen 4 Postboks 237 Økern NO-0510 Oslo (Tel: +47-2305 20 00) | Diovan 160 mg | 160 mg | film-coated tablets | Oral Use |
| Norway | Novartis Norge AS Brynsalléen 4 Postboks 237 Økern NO-0510 Oslo (Tel: +47-2305 20 00) | Diovan 320 mg | 320 mg | film-coated tablets | Oral Use |

| <u>Member State EU/EEA</u> | <u>Marketing Authorisation Holder</u> | <u>Invented name</u> | <u>Strength</u> | <u>Pharmaceutical Form</u> | <u>Route of administration</u> |
|----------------------------|--|----------------------|-----------------|----------------------------|--------------------------------|
| Poland | Novartis Pharma GmbH Roonstrasse 25 D-90429 Nürnberg Germany (Tel: +49-911-273-0) | Diovan | 40 mg | film-coated tablets | Oral Use |
| Poland | Novartis Pharma GmbH Roonstrasse 25 D-90429 Nürnberg Germany (Tel: +49-911-273-0) | Diovan | 80 mg | film-coated tablets | Oral Use |
| Poland | Novartis Pharma GmbH Roonstrasse 25 D-90429 Nürnberg Germany (Tel: +49-911-273-0) | Diovan | 160 mg | film-coated tablets | Oral Use |
| Poland | Novartis Pharma GmbH Roonstrasse 25 D-90429 Nürnberg Germany (Tel: +49-911-273-0) | Diovan | 320 mg | film-coated tablets | Oral Use |
| Portugal | Novartis Farma - Produtos Farmacêuticos S.A. Rua do Centro Empresarial, Edificio 8 Quinta da Beloura P-2710-444 Sintra (Tel: +351 21 000 86 00) | Diovan | 40 mg | film-coated tablets | Oral Use |
| Portugal | Laboratório Normal-Produtos Farmacêuticos, Lda Rua do Centro Empresarial, Edificio 8 Quinta da Beloura P-2710-444 Sintra (Tel: +351 21 000 86 00) | Tareg | 40 mg | film-coated tablets | Oral Use |

| <u>Member State EU/EEA</u> | <u>Marketing Authorisation Holder</u> | <u>Invented name</u> | <u>Strength</u> | <u>Pharmaceutical Form</u> | <u>Route of administration</u> |
|----------------------------|--|----------------------|-----------------|----------------------------|--------------------------------|
| Portugal | Novartis Farma - Produtos Farmacêuticos S.A. Rua do Centro Empresarial, Edifício 8 Quinta da Beloura P-2710-444 Sintra (Tel: +351 21 000 86 00) | Diovan | 80 mg | film-coated tablets | Oral Use |
| Portugal | Laboratório Normal-Produtos Farmacêuticos, Lda Rua do Centro Empresarial, Edifício 8 Quinta da Beloura P-2710-444 Sintra (Tel: +351 21 000 86 00) | Tareg | 80 mg | film-coated tablets | Oral Use |
| Portugal | Novartis Farma - Produtos Farmacêuticos S.A. Rua do Centro Empresarial, Edifício 8 Quinta da Beloura P-2710-444 Sintra (Tel: +351 21 000 86 00) | Diovan | 160 mg | film-coated tablets | Oral Use |
| Portugal | Laboratório Normal-Produtos Farmacêuticos, Lda Rua do Centro Empresarial, Edifício 8 Quinta da Beloura P-2710-444 Sintra (Tel: +351 21 000 86 00) | Tareg | 160 mg | film-coated tablets | Oral Use |
| Portugal | Novartis Farma - Produtos Farmacêuticos S.A. Rua do Centro Empresarial, Edifício 8 Quinta da Beloura P-2710-444 Sintra (Tel: +351 21 000 86 00) | Diovan | 320 mg | film-coated tablets | Oral Use |

| <u>Member State EU/EEA</u> | <u>Marketing Authorisation Holder</u> | <u>Invented name</u> | <u>Strength</u> | <u>Pharmaceutical Form</u> | <u>Route of administration</u> |
|----------------------------|--|---------------------------------------|-----------------|----------------------------|--------------------------------|
| Romania | Novartis Pharma GmbH Roonstrasse 25 D-90429 Nürnberg (Tel: +49-911-273-0) | Diovan 40 mg, film coated tablets | 40 mg | film-coated tablets | Oral Use |
| Romania | Novartis Pharma GmbH Roonstrasse 25 D-90429 Nürnberg (Tel: +49-911-273-0) | Diovan 80 mg, film coated tablets | 80 mg | film-coated tablets | Oral Use |
| Romania | Novartis Pharma GmbH Roonstrasse 25 D-90429 Nürnberg (Tel: +49-911-273-0) | Diovan 160 mg, film coated tablets | 160 mg | film-coated tablets | Oral Use |
| Slovak Republic | NOVARTIS s.r.o. Pharma Nagano III. U Nákladového nádraží 10 130 00 Praha 3 (Tel +420-2-2577 51 11) | Diovan 40 mg | 40 mg | film-coated tablets | Oral Use |
| Slovak Republic | NOVARTIS s.r.o. Pharma Nagano III. U Nákladového nádraží 10 130 00 Praha 3 (Tel +420-2-2577 51 11) | Diovan 80 mg | 80 mg | film-coated tablets | Oral Use |
| Slovak Republic | NOVARTIS s.r.o. Pharma Nagano III. U Nákladového nádraží 10 130 00 Praha 3 (Tel +420-2-2577 51 11) | Diovan 160 mg | 160 mg | film-coated tablets | Oral Use |
| Slovak Republic | NOVARTIS s.r.o. Pharma Nagano III. U Nákladového nádraží 10 130 00 Praha 3 (Tel +420-2-2577 51 11) | Diovan 320 mg | 320 mg | film-coated tablets | Oral Use |

| <u>Member State EU/EEA</u> | <u>Marketing Authorisation Holder</u> | <u>Invented name</u> | <u>Strength</u> | <u>Pharmaceutical Form</u> | <u>Route of administration</u> |
|----------------------------|---|--|-----------------|----------------------------|--------------------------------|
| Slovenia | Novartis Pharma GmbH Roonstrasse 25 D-90429 Nürnberg (Tel: +49-911-273-0) | Diovan 40 mg filmsko obložene tablete | 40 mg | film-coated tablets | Oral Use |
| Slovenia | Novartis Pharma GmbH Roonstrasse 25 D-90429 Nürnberg (Tel: +49-911-273-0) | Diovan 80 mg filmsko obložene tablete | 80 mg | film-coated tablets | Oral Use |
| Slovenia | Novartis Pharma GmbH Roonstrasse 25 D-90429 Nürnberg (Tel: +49-911-273-0) | Diovan 160 mg filmsko obložene tablete | 160 mg | film-coated tablets | Oral Use |
| Slovenia | Novartis Pharma GmbH Roonstrasse 25 D-90429 Nürnberg (Tel: +49-911-273-0) | Diovan 320 mg filmsko obložene tablete | 320 mg | film-coated tablets | Oral Use |
| Spain | Novartis Farmacéutica, S.A. Gran Via de les Corts Catalanes, 764 08013 Barcelona (Tel: +34-93-306 42 00) | Diován Cardio 40 mg comprimidos recubiertos con película | 40 mg | film-coated tablets | Oral Use |
| Spain | Novartis Farmacéutica, S.A. Gran Via de les Corts Catalanes, 764 08013 Barcelona (Tel: +34-93-306 42 00) | Kalpress Cardio 40 mg comprimidos recubiertos con película | 40 mg | film-coated tablets | Oral Use |
| Spain | Novartis Farmacéutica, S.A. Gran Via de les Corts Catalanes, 764 08013 Barcelona (Tel: +34-93-306 42 00) | Miten Cardio 40 mg comprimidos recubiertos con película | 40 mg | film-coated tablets | Oral Use |
| Spain | Novartis Farmacéutica, S.A. Gran Via de les Corts Catalanes, 764 08013 Barcelona (Tel: +34-93-306 42 00) | Diován 80 mg comprimidos recubiertos con película | 80 mg | film-coated tablets | Oral Use |

| <u>Member State EU/EEA</u> | <u>Marketing Authorisation Holder</u> | <u>Invented name</u> | <u>Strength</u> | <u>Pharmaceutical Form</u> | <u>Route of administration</u> |
|----------------------------|---|---|-----------------|----------------------------|--------------------------------|
| Spain | Novartis Farmacéutica, S.A. Gran Via de les Corts Catalanes, 764 08013 Barcelona (Tel: +34-93-306 42 00) | Kalpress 80 mg comprimidos recubiertos con película | 80 mg | film-coated tablets | Oral Use |
| Spain | Novartis Farmacéutica, S.A. Gran Via de les Corts Catalanes, 764 08013 Barcelona (Tel: +34-93-306 42 00) | Miten 80 mg comprimidos recubiertos con película | 80 mg | film-coated tablets | Oral Use |
| Spain | Novartis Farmacéutica, S.A. Gran Via de les Corts Catalanes, 764 08013 Barcelona (Tel: +34-93-306 42 00) | Diován 160 mg comprimidos recubiertos con película | 160 mg | film-coated tablets | Oral Use |
| Spain | Novartis Farmacéutica, S.A. Gran Via de les Corts Catalanes, 764 08013 Barcelona (Tel: +34-93-306 42 00) | Kalpress 160 mg comprimidos recubiertos con película | 160 mg | film-coated tablets | Oral Use |
| Spain | Novartis Farmacéutica, S.A. Gran Via de les Corts Catalanes, 764 08013 Barcelona (Tel: +34-93-306 42 00) | Miten 160 mg comprimidos recubiertos con película | 160 mg | film-coated tablets | Oral Use |
| Spain | Novartis Farmacéutica, S.A. Gran Via de les Corts Catalanes, 764 08013 Barcelona (Tel: +34-93-306 42 00) | Diován 320 mg comprimidos recubiertos con película | 320 mg | film-coated tablets | Oral Use |
| Spain | Novartis Farmacéutica, S.A. Gran Via de les Corts Catalanes, 764 08013 Barcelona (Tel: +34-93-306 42 00) | Kalpress 320 mg comprimidos recubiertos con película | 320 mg | film-coated tablets | Oral Use |
| Spain | Novartis Farmacéutica, S.A. Gran Via de les Corts Catalanes, 764 08013 Barcelona (Tel: +34-93-306 42 00) | Miten 320 mg comprimidos recubiertos con película | 320 mg | film-coated tablets | Oral Use |

| <u>Member State EU/EEA</u> | <u>Marketing Authorisation Holder</u> | <u>Invented name</u> | <u>Strength</u> | <u>Pharmaceutical Form</u> | <u>Route of administration</u> |
|----------------------------|---|-----------------------|-----------------|----------------------------|--------------------------------|
| Sweden | Novartis Sverige AB Kemistvägen 1B P.O. Box 1150 SE-183 11 Täby (Tel: + 46-8-732 32 00) | Diovan | 40 mg | film-coated tablets | Oral Use |
| Sweden | Novartis Sverige AB Kemistvägen 1B P.O. Box 1150 SE-183 11 Täby (Tel: + 46-8-732 32 00) | Angiosan | 40 mg | film-coated tablets | Oral Use |
| Sweden | Novartis Sverige AB Kemistvägen 1B P.O. Box 1150 SE-183 11 Täby (Tel: + 46-8-732 32 00) | Valsartan Novartis | 40 mg | film-coated tablets | Oral Use |
| Sweden | Novartis Sverige AB Kemistvägen 1B P.O. Box 1150 SE-183 11 Täby (Tel: + 46-8-732 32 00) | Diovan | 80 mg | film-coated tablets | Oral Use |
| Sweden | Novartis Sverige AB Kemistvägen 1B P.O. Box 1150 SE-183 11 Täby (Tel: + 46-8-732 32 00) | Angiosan | 80 mg | film-coated tablets | Oral Use |
| Sweden | Novartis Sverige AB Kemistvägen 1B P.O. Box 1150 SE-183 11 Täby (Tel: + 46-8-732 32 00) | Valsartan Novartis | 80 mg | film-coated tablets | Oral Use |

| <u>Member State EU/EEA</u> | <u>Marketing Authorisation Holder</u> | <u>Invented name</u> | <u>Strength</u> | <u>Pharmaceutical Form</u> | <u>Route of administration</u> |
|----------------------------|---|-----------------------|-----------------|----------------------------|--------------------------------|
| Sweden | Novartis Sverige AB Kemistvägen 1B P.O. Box 1150 SE-183 11 Täby (Tel: + 46-8-732 32 00) | Diovan | 160 mg | film-coated tablets | Oral Use |
| Sweden | Novartis Sverige AB Kemistvägen 1B P.O. Box 1150 SE-183 11 Täby (Tel: + 46-8-732 32 00) | Angiosan | 160 mg | film-coated tablets | Oral Use |
| Sweden | Novartis Sverige AB Kemistvägen 1B P.O. Box 1150 SE-183 11 Täby (Tel: + 46-8-732 32 00) | Valsartan Novartis | 160 mg | film-coated tablets | Oral Use |
| Sweden | Novartis Sverige AB Kemistvägen 1B P.O. Box 1150 SE-183 11 Täby (Tel: + 46-8-732 32 00) | Diovan | 320 mg | film-coated tablets | Oral Use |
| Sweden | Novartis Sverige AB Kemistvägen 1B P.O. Box 1150 SE-183 11 Täby (Tel: + 46-8-732 32 00) | Angiosan | 320 mg | film-coated tablets | Oral Use |
| Sweden | Novartis Sverige AB Kemistvägen 1B P.O. Box 1150 SE-183 11 Täby (Tel: + 46-8-732 32 00) | Valsartan Novartis | 320 mg | film-coated tablets | Oral Use |

| <u>Member State EU/EEA</u> | <u>Marketing Authorisation Holder</u> | <u>Invented name</u> | <u>Strength</u> | <u>Pharmaceutical Form</u> | <u>Route of administration</u> |
|----------------------------|---|----------------------|-----------------|----------------------------|--------------------------------|
| United Kingdom | Novartis Pharmaceuticals UK Ltd Frimley Business Park Frimley, Camberley Surrey GU16 7SR United Kingdom (Tel: +44-1276-69 22 55) | Diovan 40 mg | 40 mg | film-coated tablets | Oral Use |
| United Kingdom | Novartis Pharmaceuticals UK Ltd Frimley Business Park Frimley, Camberley Surrey GU16 7SR United Kingdom (Tel: +44-1276-69 22 55) | Diovan 80 mg | 80 mg | film-coated tablets | Oral Use |
| United Kingdom | Novartis Pharmaceuticals UK Ltd Frimley Business Park Frimley, Camberley Surrey GU16 7SR United Kingdom (Tel: +44-1276-69 22 55) | Diovan 160 mg | 160 mg | film-coated tablets | Oral Use |
| United Kingdom | Novartis Pharmaceuticals UK Ltd Frimley Business Park Frimley, Camberley Surrey GU16 7SR United Kingdom (Tel: +44-1276-69 22 55) | Diovan 320 mg | 320 mg | film-coated tablets | Oral Use |

ANNEX II

**AMENDMENTS TO SUMMARY OF PRODUCT CHARACTERISTICS AND
PACKAGE LEAFLET**

SUMMARY OF PRODUCT CHARACTERISTICS

1. NAME OF THE MEDICINAL PRODUCT

Diovan and associated names (see Annex I) 40 mg film-coated tablets
Diovan and associated names (see Annex I) 80 mg film-coated tablets
Diovan and associated names (see Annex I) 160 mg film-coated tablets
Diovan and associated names (see Annex I) 320 mg film-coated tablets
[See Annex I – To be completed nationally]

2. QUALITATIVE AND QUANTITATIVE COMPOSITION

One film-coated tablet contains 40 mg of valsartan.
One film-coated tablet contains 80 mg of valsartan.
One film-coated tablet contains 160 mg of valsartan.
One film-coated tablet contains 320 mg of valsartan.

For a full list of excipients, see section 6.1.
[To be completed nationally]

3. PHARMACEUTICAL FORM

[To be completed nationally]

4. CLINICAL PARTICULARS

4.1 Therapeutic indications

Hypertension

Treatment of hypertension in children and adolescents 6 to 18 years of age.

Recent myocardial infarction

Treatment of clinically stable adult patients with symptomatic heart failure or asymptomatic left ventricular systolic dysfunction after a recent (12 hours-10 days) myocardial infarction (see sections 4.4 and 5.1).

Heart failure

Treatment of symptomatic heart failure in adult patients when Angiotensin Converting Enzyme (ACE) inhibitors cannot be used, or as add-on therapy to ACE inhibitors when beta blockers cannot be used (see sections 4.4 and 5.1).

Hypertension

Treatment of essential hypertension in adults, and hypertension in children and adolescents 6 to 18 years of age.

Recent myocardial infarction

Treatment of clinically stable adult patients with symptomatic heart failure or asymptomatic left ventricular systolic dysfunction after a recent (12 hours-10 days) myocardial infarction (see sections 4.4 and 5.1).

Heart failure

Treatment of symptomatic heart failure in adult patients when Angiotensin Converting Enzyme (ACE) inhibitors cannot be used, or as add-on therapy to ACE inhibitors when beta blockers cannot be used (see sections 4.4 and 5.1).

Hypertension

Treatment of essential hypertension in adults, and hypertension in children and adolescents 6 to 18 years of age.

Recent myocardial infarction

Treatment of clinically stable adult patients with symptomatic heart failure or asymptomatic left ventricular systolic dysfunction after a recent (12 hours-10 days) myocardial infarction (see sections 4.4 and 5.1).

Heart failure

Treatment of symptomatic heart failure in adult patients when Angiotensin Converting Enzyme (ACE) inhibitors cannot be used, or as add-on therapy to ACE inhibitors when beta blockers cannot be used (see sections 4.4 and 5.1).

Hypertension

Treatment of essential hypertension in adults, and hypertension in children and adolescents 6 to 18 years of age.

4.2 Posology and method of administration

Posology

Recent myocardial infarction

In clinically stable patients, therapy may be initiated as early as 12 hours after a myocardial infarction. After an initial dose of 20 mg twice daily, valsartan should be titrated to 40 mg, 80 mg, and 160 mg twice daily over the next few weeks. The starting dose is provided by the 40 mg divisible tablet.

The target maximum dose is 160 mg twice daily. In general, it is recommended that patients achieve a dose level of 80 mg twice daily by two weeks after treatment initiation and that the target maximum dose, 160 mg twice daily, be achieved by three months, based on the patient's tolerability. If symptomatic hypotension or renal dysfunction occur, consideration should be given to a dose reduction.

Valsartan may be used in patients treated with other post-myocardial infarction therapies, e.g. thrombolytics, acetylsalicylic acid, beta blockers, statins, and diuretics. The combination with ACE inhibitors is not recommended (see sections 4.4 and 5.1).

Evaluation of post-myocardial infarction patients should always include assessment of renal function.

Heart failure

The recommended starting dose of Diovan is 40 mg twice daily. Uptitration to 80 mg and 160 mg twice daily should be done at intervals of at least two weeks to the highest dose, as tolerated by the patient. Consideration should be given to reducing the dose of concomitant diuretics. The maximum daily dose administered in clinical trials is 320 mg in divided doses.

Valsartan may be administered with other heart failure therapies. However, the triple combination of an ACE inhibitor, a beta blocker and valsartan is not recommended (see sections 4.4 and 5.1).

Evaluation of patients with heart failure should always include assessment of renal function.

Hypertension

The recommended starting dose of Diovan is 80 mg once daily. The antihypertensive effect is substantially present within 2 weeks, and maximal effects are attained within 4 weeks. In some patients whose blood pressure is not adequately controlled, the dose can be increased to 160 mg and to a maximum of 320 mg. Diovan may also be administered with other antihypertensive agents. The addition of a diuretic such as hydrochlorothiazide will decrease blood pressure even further in these patients.

Recent myocardial infarction

In clinically stable patients, therapy may be initiated as early as 12 hours after a myocardial infarction. After an initial dose of 20 mg twice daily, valsartan should be titrated to 40 mg, 80 mg, and 160 mg twice daily over the next few weeks. The starting dose is provided by the 40 mg divisible tablet.

The target maximum dose is 160 mg twice daily. In general, it is recommended that patients achieve a dose level of 80 mg twice daily by two weeks after treatment initiation and that the target maximum dose, 160 mg twice daily, be achieved by three months, based on the patient's tolerability. If symptomatic hypotension or renal dysfunction occur, consideration should be given to a dose reduction.

Valsartan may be used in patients treated with other post-myocardial infarction therapies, e.g. thrombolytics, acetylsalicylic acid, beta blockers, statins, and diuretics. The combination with ACE inhibitors is not recommended (see sections 4.4 and 5.1).

Evaluation of post-myocardial infarction patients should always include assessment of renal function.

Heart failure

The recommended starting dose of Diovan is 40 mg twice daily. Uptitration to 80 mg and 160 mg twice daily should be done at intervals of at least two weeks to the highest dose, as tolerated by the patient.

Consideration should be given to reducing the dose of concomitant diuretics. The maximum daily dose administered in clinical trials is 320 mg in divided doses.

Valsartan may be administered with other heart failure therapies. However, the triple combination of an ACE inhibitor, a beta blocker and valsartan is not recommended (see sections 4.4 and 5.1).

Evaluation of patients with heart failure should always include assessment of renal function.

Hypertension

The recommended starting dose of Diovan is 80 mg once daily. The antihypertensive effect is substantially present within 2 weeks, and maximal effects are attained within 4 weeks. In some patients whose blood pressure is not adequately controlled, the dose can be increased to 160 mg and to a maximum of 320 mg. Diovan may also be administered with other antihypertensive agents. The addition of a diuretic such as hydrochlorothiazide will decrease blood pressure even further in these patients.

Recent myocardial infarction

In clinically stable patients, therapy may be initiated as early as 12 hours after a myocardial infarction. After an initial dose of 20 mg twice daily, valsartan should be titrated to 40 mg, 80 mg, and 160 mg twice daily over the next few weeks. The starting dose is provided by the 40 mg divisible tablet.

The target maximum dose is 160 mg twice daily. In general, it is recommended that patients achieve a dose level of 80 mg twice daily by two weeks after treatment initiation and that the target maximum dose, 160 mg twice daily, be achieved by three months, based on the patient's tolerability. If symptomatic hypotension or renal dysfunction occur, consideration should be given to a dose reduction.

Valsartan may be used in patients treated with other post-myocardial infarction therapies, e.g. thrombolytics, acetylsalicylic acid, beta blockers, statins, and diuretics. The combination with ACE inhibitors is not recommended (see sections 4.4 and 5.1).

Evaluation of post-myocardial infarction patients should always include assessment of renal function.

Heart failure

The recommended starting dose of Diovan is 40 mg twice daily. Uptitration to 80 mg and 160 mg twice daily should be done at intervals of at least two weeks to the highest dose, as tolerated by the patient.

Consideration should be given to reducing the dose of concomitant diuretics. The maximum daily dose administered in clinical trials is 320 mg in divided doses.

Valsartan may be administered with other heart failure therapies. However, the triple combination of an ACE inhibitor, a beta blocker and valsartan is not recommended (see sections 4.4 and 5.1).

Evaluation of patients with heart failure should always include assessment of renal function.

Hypertension

The recommended starting dose of Diovan is 80 mg once daily. The antihypertensive effect is substantially present within 2 weeks, and maximal effects are attained within 4 weeks. In some patients whose blood pressure is not adequately controlled, the dose can be increased to 160 mg and to a maximum of 320 mg. Diovan may also be administered with other antihypertensive agents. The addition of a diuretic such as hydrochlorothiazide will decrease blood pressure even further in these patients.

Additional information on special populations

Elderly

No dose adjustment is required in elderly patients.

Renal impairment

No dose adjustment is required for adult patients with a creatinine clearance >10 ml/min (see sections 4.4 and 5.2).

Hepatic impairment

Diovan is contraindicated in patients with severe hepatic impairment, biliary cirrhosis and in patients with cholestasis (see sections 4.3, 4.4 and 5.2). In patients with mild to moderate hepatic impairment without cholestasis, the dose of valsartan should not exceed 80 mg.

Paediatric population

Paediatric hypertension

Children and adolescents 6 to 18 years of age

The initial dose is 40 mg once daily for children weighing below 35 kg and 80 mg once daily for those weighing 35 kg or more. The dose should be adjusted based on blood pressure response. For maximum doses studied in clinical trials please refer to the table below.

Doses higher than those listed have not been studied and are therefore not recommended.

| Weight | Maximum dose studied in clinical trials |
|-------------------|---|
| ≥18 kg to <35 kg | 80 mg |
| ≥35 kg to <80 kg | 160 mg |
| ≥80 kg to ≤160 kg | 320 mg |

Children less than 6 years of age

Available data are described in sections 4.8, 5.1 and 5.2. However safety and efficacy of Diovan in children aged 1 to 6 years have not been established.

Use in paediatric patients aged 6 to 18 years with renal impairment

Use in paediatric patients with a creatinine clearance <30 ml/min and paediatric patients undergoing dialysis has not been studied, therefore valsartan is not recommended in these patients. No dose adjustment is required for paediatric patients with a creatinine clearance >30 ml/min. Renal function and serum potassium should be closely monitored (see sections 4.4 and 5.2).

Use in paediatric patients aged 6 to 18 years with hepatic impairment

As in adults, Diovan is contraindicated in paediatric patients with severe hepatic impairment, biliary cirrhosis and in patients with cholestasis (see sections 4.3, 4.4 and 5.2). There is limited clinical experience with Diovan in paediatric patients with mild to moderate hepatic impairment. The dose of valsartan should not exceed 80 mg in these patients.

Paediatric heart failure and recent myocardial infarction

Diovan is not recommended for the treatment of heart failure or recent myocardial infarction in children and adolescents below the age of 18 years due to the lack of data on safety and efficacy.

Method of administration

Diovan may be taken independently of a meal and should be administered with water.

4.3 Contraindications

- Hypersensitivity to the active substance or to any of the excipients.
- Severe hepatic impairment, biliary cirrhosis and cholestasis.
- Second and third trimester of pregnancy (see sections 4.4 and 4.6).

4.4 Special warnings and precautions for use

Hyperkalaemia

Concomitant use with potassium supplements, potassium-sparing diuretics, salt substitutes containing potassium, or other agents that may increase potassium levels (heparin, etc.) is not recommended. Monitoring of potassium should be undertaken as appropriate.

Impaired renal function

There is currently no experience on the safe use in patients with a creatinine clearance <10 ml/min and patients undergoing dialysis, therefore valsartan should be used with caution in these patients. No dose adjustment is required for adult patients with creatinine clearance >10 ml/min (see sections 4.2 and 5.2).

Hepatic impairment

In patients with mild to moderate hepatic impairment without cholestasis, Diovan should be used with caution (see sections 4.2 and 5.2).

Sodium- and/or volume-depleted patients

In severely sodium-depleted and/or volume-depleted patients, such as those receiving high doses of diuretics, symptomatic hypotension may occur in rare cases after initiation of therapy with Diovan. Sodium and/or volume depletion should be corrected before starting treatment with Diovan, for example by reducing the diuretic dose.

Renal artery stenosis

In patients with bilateral renal artery stenosis or stenosis to a solitary kidney, the safe use of Diovan has not been established.

Short-term administration of Diovan to twelve patients with renovascular hypertension secondary to unilateral renal artery stenosis did not induce any significant changes in renal haemodynamics, serum creatinine, or blood urea nitrogen (BUN). However, other agents that affect the renin-angiotensin system may increase blood urea and serum creatinine in patients with unilateral renal artery stenosis, therefore monitoring of renal function is recommended when patients are treated with valsartan.

Kidney transplantation

There is currently no experience on the safe use of Diovan in patients who have recently undergone kidney transplantation.

Primary hyperaldosteronism

Patients with primary hyperaldosteronism should not be treated with Diovan as their renin-angiotensin system is not activated.

Aortic and mitral valve stenosis, obstructive hypertrophic cardiomyopathy

As with all other vasodilators, special caution is indicated in patients suffering from aortic or mitral stenosis, or hypertrophic obstructive cardiomyopathy (HOCM).

Pregnancy

Angiotensin II Receptor Antagonists (AIIRAs) should not be initiated during pregnancy. Unless continued AIIRAs therapy is considered essential, patients planning pregnancy should be changed to alternative anti-hypertensive treatments which have an established safety profile for use in pregnancy. When pregnancy is

diagnosed, treatment with AIIRAs should be stopped immediately, and, if appropriate, alternative therapy should be started (see sections 4.3 and 4.6).

Recent myocardial infarction

The combination of captopril and valsartan has shown no additional clinical benefit, instead the risk for adverse events increased compared to treatment with the respective therapies (see sections 4.2 and 5.1). Therefore, the combination of valsartan with an ACE inhibitor is not recommended.

Caution should be observed when initiating therapy in post-myocardial infarction patients. Evaluation of post-myocardial infarction patients should always include assessment of renal function (see section 4.2). Use of Diovan in post-myocardial infarction patients commonly results in some reduction in blood pressure, but discontinuation of therapy because of continuing symptomatic hypotension is not usually necessary provided dosing instructions are followed (see section 4.2).

Heart Failure

In patients with heart failure, the triple combination of an ACE inhibitor, a beta blocker and Diovan has not shown any clinical benefit (see section 5.1). This combination apparently increases the risk for adverse events and is therefore not recommended.

Caution should be observed when initiating therapy in patients with heart failure. Evaluation of patients with heart failure should always include assessment of renal function (see section 4.2).

Use of Diovan in patients with heart failure commonly results in some reduction in blood pressure, but discontinuation of therapy because of continuing symptomatic hypotension is not usually necessary provided dosing instructions are followed (see section 4.2).

In patients whose renal function may depend on the activity of the renin-angiotensin system (e.g patients with severe congestive heart failure), treatment with angiotensin converting enzyme inhibitors has been associated with oliguria and/or progressive azotaemia and in rare cases with acute renal failure and/or death. As valsartan is an angiotensin II antagonist, it cannot be excluded that the use of Diovan may be associated with impairment of the renal function.

Recent myocardial infarction

The combination of captopril and valsartan has shown no additional clinical benefit, instead the risk for adverse events increased compared to treatment with the respective therapies (see sections 4.2 and 5.1). Therefore, the combination of valsartan with an ACE inhibitor is not recommended.

Caution should be observed when initiating therapy in post-myocardial infarction patients. Evaluation of post-myocardial infarction patients should always include assessment of renal function (see section 4.2). Use of Diovan in post-myocardial infarction patients commonly results in some reduction in blood pressure, but discontinuation of therapy because of continuing symptomatic hypotension is not usually necessary provided dosing instructions are followed (see section 4.2).

Heart Failure

In patients with heart failure, the triple combination of an ACE inhibitor, a beta blocker and Diovan has not shown any clinical benefit (see section 5.1). This combination apparently increases the risk for adverse events and is therefore not recommended.

Caution should be observed when initiating therapy in patients with heart failure. Evaluation of patients with heart failure should always include assessment of renal function (see section 4.2).

Use of Diovan in patients with heart failure commonly results in some reduction in blood pressure, but discontinuation of therapy because of continuing symptomatic hypotension is not usually necessary provided dosing instructions are followed (see section 4.2).

In patients whose renal function may depend on the activity of the renin-angiotensin system (e.g patients with severe congestive heart failure), treatment with angiotensin converting enzyme inhibitors has been associated with oliguria and/or progressive azotaemia and in rare cases with acute renal failure and/or death. As valsartan is an angiotensin II antagonist, it cannot be excluded that the use of Diovan may be associated with impairment of the renal function.

Recent myocardial infarction

The combination of captopril and valsartan has shown no additional clinical benefit, instead the risk for adverse events increased compared to treatment with the respective therapies (see sections 4.2 and 5.1). Therefore, the combination of valsartan with an ACE inhibitor is not recommended.

Caution should be observed when initiating therapy in post-myocardial infarction patients. Evaluation of post-myocardial infarction patients should always include assessment of renal function (see section 4.2). Use of Diovan in post-myocardial infarction patients commonly results in some reduction in blood pressure, but discontinuation of therapy because of continuing symptomatic hypotension is not usually necessary provided dosing instructions are followed (see section 4.2).

Heart Failure

In patients with heart failure, the triple combination of an ACE inhibitor, a beta blocker and Diovan has not shown any clinical benefit (see section 5.1). This combination apparently increases the risk for adverse events and is therefore not recommended.

Caution should be observed when initiating therapy in patients with heart failure. Evaluation of patients with heart failure should always include assessment of renal function (see section 4.2).

Use of Diovan in patients with heart failure commonly results in some reduction in blood pressure, but discontinuation of therapy because of continuing symptomatic hypotension is not usually necessary provided dosing instructions are followed (see section 4.2).

In patients whose renal function may depend on the activity of the renin-angiotensin system (e.g patients with severe congestive heart failure), treatment with angiotensin converting enzyme inhibitors has been associated with oliguria and/or progressive azotaemia and in rare cases with acute renal failure and/or death. As valsartan is an angiotensin II antagonist, it cannot be excluded that the use of Diovan may be associated with impairment of the renal function.

Other conditions with stimulation of the renin-angiotensin system

In patients whose renal function may depend on the activity of the renin-angiotensin system (e.g patients with severe congestive heart failure), treatment with angiotensin converting enzyme inhibitors has been associated with oliguria and/or progressive azotaemia and in rare cases with acute renal failure and/or death. As valsartan is an angiotensin II antagonist, it cannot be excluded that the use of Diovan may be associated with impairment of the renal function.

Paediatric population

Impaired renal function

Use in paediatric patients with a creatinine clearance <30 ml/min and paediatric patients undergoing dialysis has not been studied, therefore valsartan is not recommended in these patients. No dose adjustment is required for paediatric patients with a creatinine clearance >30 ml/min (see sections 4.2 and 5.2). Renal function and serum potassium should be closely monitored during treatment with valsartan. This applies particularly when valsartan is given in the presence of other conditions (fever, dehydration) likely to impair renal function.

Impaired hepatic function

As in adults, Diovan is contraindicated in paediatric patients with severe hepatic impairment, biliary cirrhosis and in patients with cholestasis (see sections 4.3 and 5.2). There is limited clinical experience with Diovan in paediatric patients with mild to moderate hepatic impairment. The dose of valsartan should not exceed 80 mg in these patients.

4.5 Interaction with other medicinal products and other forms of interaction

Concomitant use not recommended

Lithium

Reversible increases in serum lithium concentrations and toxicity have been reported during concurrent use of ACE inhibitors. Due to the lack of experience with concomitant use of valsartan and lithium, this combination is not recommended. If the combination proves necessary, careful monitoring of serum lithium levels is recommended.

Potassium-sparing diuretics, potassium supplements, salt substitutes containing potassium and other substances that may increase potassium levels

If a medicinal product that affects potassium levels is considered necessary in combination with valsartan, monitoring of potassium plasma levels is advised.

Caution required with concomitant use

Non-steroidal anti-inflammatory medicines (NSAIDs), including selective COX-2 inhibitors, acetylsalicylic acid >3 g/day, and non-selective NSAIDs

When angiotensin II antagonists are administered simultaneously with NSAIDs, attenuation of the antihypertensive effect may occur. Furthermore, concomitant use of angiotensin II antagonists and NSAIDs may lead to an increased risk of worsening of renal function and an increase in serum potassium. Therefore, monitoring of renal function at the beginning of the treatment is recommended, as well as adequate hydration of the patient.

Others

In drug interaction studies with valsartan, no interactions of clinical significance have been found with valsartan or any of the following substances: cimetidine, warfarin, furosemide, digoxin, atenolol, indometacin, hydrochlorothiazide, amlodipine, glibenclamide.

Paediatric population

In hypertension in children and adolescents, where underlying renal abnormalities are common, caution is recommended with the concomitant use of valsartan and other substances that inhibit the renin-angiotensin-aldosterone system which may increase serum potassium. Renal function and serum potassium should be closely monitored.

4.6 Fertility, pregnancy and lactation

Pregnancy

The use of Angiotensin II Receptor Antagonists (AIIRAs) is not recommended during the first trimester of pregnancy (see section 4.4). The use of AIIRAs is contra-indicated during the second and third trimester of pregnancy (see sections 4.3 and 4.4).

Epidemiological evidence regarding the risk of teratogenicity following exposure to ACE inhibitors during the first trimester of pregnancy has not been conclusive; however, a small increase in risk cannot be excluded. Whilst there is no controlled epidemiological data on the risk with AIIRAs, similar risks may exist for this class of drugs. Unless continued AIIRA therapy is considered essential, patients planning pregnancy should be changed to alternative anti-hypertensive treatments which have an established safety profile for use in pregnancy. When pregnancy is diagnosed, treatment with AIIRAs should be stopped immediately, and, if appropriate, alternative therapy should be started.

AIIRAs therapy exposure during the second and third trimesters is known to induce human fetotoxicity (decreased renal function, oligohydramnios, skull ossification retardation) and neonatal toxicity (renal failure, hypotension, hyperkalemia); see also section 5.3 “Preclinical safety data”.

Should exposure to AIIRAs have occurred from the second trimester of pregnancy, ultrasound check of renal function and skull is recommended.

Infants whose mothers have taken AIIRAs should be closely observed for hypotension (see also sections 4.3 and 4.4).

Lactation

Because no information is available regarding the use of valsartan during breastfeeding, Diovan is not recommended and alternative treatments with better established safety profiles during breast-feeding are preferable, especially while nursing a newborn or preterm infant.

Fertility

Valsartan had no adverse effects on the reproductive performance of male or female rats at oral doses up to 200 mg/kg/day. This dose is 6 times the maximum recommended human dose on a mg/m² basis (calculations assume an oral dose of 320 mg/day and a 60-kg patient).

4.7 Effects on ability to drive and use machines

No studies on the effects on the ability to drive have been performed. When driving vehicles or operating machines it should be taken into account that occasionally dizziness or weariness may occur.

4.8 Undesirable effects

In controlled clinical studies in adult patients with hypertension, the overall incidence of adverse reactions (ADRs) was comparable with placebo and is consistent with the pharmacology of valsartan. The incidence of ADRs did not appear to be related to dose or treatment duration and also showed no association with gender, age or race.

The ADRs reported from clinical studies, post-marketing experience and laboratory findings are listed below according to system organ class.

Adverse reactions are ranked by frequency, the most frequent first, using the following convention: very common ($\geq 1/10$); common ($\geq 1/100$ to $< 1/10$); uncommon ($\geq 1/1,000$ to $< 1/100$); rare ($\geq 1/10,000$ to $< 1/1,000$) very rare ($< 1/10,000$), including isolated reports. Within each frequency grouping, adverse reactions are ranked in order of decreasing seriousness.

For all the ADRs reported from post-marketing experience and laboratory findings, it is not possible to apply any ADR frequency and therefore they are mentioned with a "not known" frequency.

- Hypertension

| | |
|---|---|
| Blood and lymphatic system disorders | |
| Not known | Decrease in haemoglobin, Decrease in haematocrit, Neutropenia, Thrombocytopenia |
| Immune system disorders | |
| Not known | Hypersensitivity including serum sickness |
| Metabolism and nutrition disorders | |
| Not known | Increase of serum potassium |
| Ear and labyrinth system disorders | |
| Uncommon | Vertigo |
| Vascular disorders | |
| Not known | Vasculitis |
| Respiratory, thoracic and mediastinal disorders | |
| Uncommon | Cough |
| Gastrointestinal disorders | |
| Uncommon | Abdominal pain |
| Hepato-biliary disorders | |
| Not known | Elevation of liver function values including increase of serum bilirubin |
| Skin and subcutaneous tissue disorders | |
| Not known | Angioedema, Rash, Pruritus |
| Musculoskeletal and connective tissue disorders | |
| Not known | Myalgia |
| Renal and urinary disorders | |
| Not known | Renal failure and impairment, Elevation of serum creatinine |
| General disorders and administration site conditions | |
| Uncommon | Fatigue |

Paediatric population

Hypertension

The antihypertensive effect of valsartan has been evaluated in two randomised, double-blind clinical studies in 561 paediatric patients from 6 to 18 years of age. With the exception of isolated gastrointestinal disorders (like abdominal pain, nausea, vomiting) and dizziness, no relevant differences in terms of type, frequency and severity of adverse reactions were identified between the safety profile for paediatric patients aged 6 to 18 years and that previously reported for adult patients.

Neurocognitive and developmental assessment of paediatric patients aged 6 to 16 years of age revealed no overall clinically relevant adverse impact after treatment with Diovan for up to one year.

In a double-blind randomized study in 90 children aged 1 to 6 years, which was followed by a one-year open-label extension, two deaths and isolated cases of marked liver transaminases elevations were observed. These cases occurred in a population who had significant comorbidities. A causal relationship to Diovan has not been established. In a second study in which 75 children aged 1 to 6 years were randomised, no significant liver transaminase elevations or death occurred with valsartan treatment.

Hyperkalaemia was more frequently observed in children and adolescents aged 6 to 18 years with underlying chronic kidney disease.

The safety profile seen in controlled-clinical studies in adult patients with post-myocardial infarction and/or heart failure varies from the overall safety profile seen in hypertensive patients. This may relate to the patients underlying disease. ADRs that occurred in adult patients with post-myocardial infarction and/or heart failure patients are listed below.

- Post-myocardial infarction and/or heart failure (studied in adult patients only)

| | |
|---|--|
| Blood and lymphatic system disorders | |
| Not known | Thrombocytopenia |
| Immune system disorders | |
| Not known | Hypersensitivity including serum sickness |
| Metabolism and nutrition disorders | |
| Uncommon | Hyperkalaemia |
| Not known | Increase of serum potassium |
| Nervous system disorders | |
| Common | Dizziness, Postural dizziness |
| Uncommon | Syncope, Headache |
| Ear and labyrinth system disorders | |
| Uncommon | Vertigo |
| Cardiac disorders | |
| Uncommon | Cardiac failure |
| Vascular disorders | |
| Common | Hypotension, Orthostatic hypotension |
| Not known | Vasculitis |
| Respiratory, thoracic and mediastinal disorders | |
| Uncommon | Cough |
| Gastrointestinal disorders | |
| Uncommon | Nausea, Diarrhoea |
| Hepato-biliary disorders | |
| Not known | Elevation of liver function values |
| Skin and subcutaneous tissue disorders | |
| Uncommon | Angioedema |
| Not known | Rash, Pruritis |
| Musculoskeletal and connective tissue disorders | |
| Not known | Myalgia |
| Renal and urinary disorders | |
| Common | Renal failure and impairment |
| Uncommon | Acute renal failure, Elevation of serum creatinine |
| Not known | Increase in Blood Urea Nitrogen |
| General disorders and administration site conditions | |
| Uncommon | Asthenia, Fatigue |

4.9 Overdose

Symptoms

Overdose with Diovan may result in marked hypotension, which could lead to depressed level of consciousness, circulatory collapse and/or shock.

Treatment

The therapeutic measures depend on the time of ingestion and the type and severity of the symptoms; stabilisation of the circulatory condition is of prime importance.

If hypotension occurs, the patient should be placed in a supine position and blood volume correction should be undertaken.

Valsartan is unlikely to be removed by haemodialysis.

5. PHARMACOLOGICAL PROPERTIES

5.1 Pharmacodynamic properties

Pharmacotherapeutic group: Angiotensin II Antagonists, plain, ATC code: C09CA03

Valsartan is an orally active, potent, and specific angiotensin II (Ang II) receptor antagonist. It acts selectively on the AT₁ receptor subtype, which is responsible for the known actions of angiotensin II. The increased plasma levels of Ang II following AT₁ receptor blockade with valsartan may stimulate the unblocked AT₂ receptor, which appears to counterbalance the effect of the AT₁ receptor. Valsartan does not exhibit any partial agonist activity at the AT₁ receptor and has much (about 20,000 fold) greater affinity for the AT₁ receptor than for the AT₂ receptor. Valsartan is not known to bind to or block other hormone receptors or ion channels known to be important in cardiovascular regulation.

Valsartan does not inhibit ACE (also known as kininase II) which converts Ang I to Ang II and degrades bradykinin. Since there is no effect on ACE and no potentiation of bradykinin or substance P, angiotensin II antagonists are unlikely to be associated with coughing. In clinical trials where valsartan was compared with an ACE inhibitor, the incidence of dry cough was significantly ($p < 0.05$) less in patients treated with valsartan than in those treated with an ACE inhibitor (2.6% versus 7.9% respectively). In a clinical trial of patients with a history of dry cough during ACE inhibitor therapy, 19.5% of trial subjects receiving valsartan and 19.0% of those receiving a thiazide diuretic experienced cough compared to 68.5% of those treated with an ACE inhibitor ($p < 0.05$).

Recent myocardial infarction

The VALsartan In Acute myocardial iNfarcTion trial (VALIANT) was a randomised, controlled, multinational, double-blind study in 14,703 patients with acute myocardial infarction and signs, symptoms or radiological evidence of congestive heart failure and/or evidence of left ventricular systolic dysfunction (manifested as an ejection fraction $\leq 40\%$ by radionuclide ventriculography or $\leq 35\%$ by echocardiography or ventricular contrast angiography). Patients were randomised within 12 hours to 10 days after the onset of myocardial infarction symptoms to valsartan, captopril, or the combination of both. The mean treatment duration was two years. The primary endpoint was time to all-cause mortality.

Valsartan was as effective as captopril in reducing all-cause mortality after myocardial infarction. All-cause mortality was similar in the valsartan (19.9%), captopril (19.5%), and valsartan + captopril (19.3%) groups. Combining valsartan with captopril did not add further benefit over captopril alone. There was no difference between valsartan and captopril in all-cause mortality based on age, gender, race, baseline therapies or underlying disease. Valsartan was also effective in prolonging the time to and reducing cardiovascular mortality, hospitalisation for heart failure, recurrent myocardial infarction, resuscitated cardiac arrest, and non-fatal stroke (secondary composite endpoint).

The safety profile of valsartan was consistent with the clinical course of patients treated in the post-myocardial infarction setting. Regarding renal function, doubling of serum creatinine was observed in 4.2% of valsartan-treated patients, 4.8% of valsartan+captopril-treated patients, and 3.4% of captopril-treated patients. Discontinuations due to various types of renal dysfunction occurred in 1.1% of valsartan-treated patients, 1.3% in valsartan+captopril patients, and 0.8% of captopril patients. An assessment of renal function should be included in the evaluation of patients post-myocardial infarction.

There was no difference in all-cause mortality, cardiovascular mortality or morbidity when beta blockers were administered together with the combination of valsartan + captopril, valsartan alone, or captopril alone. Irrespective of treatment, mortality was lower in the group of patients treated with a beta blocker, suggesting that the known beta blocker benefit in this population was maintained in this trial.

Heart failure

Val-HeFT was a randomised, controlled, multinational clinical trial of valsartan compared with placebo on morbidity and mortality in 5,010 NYHA class II (62%), III (36%) and IV (2%) heart failure patients receiving usual therapy with LVEF <40% and left ventricular internal diastolic diameter (LVIDD) >2.9 cm/m². Baseline therapy included ACE inhibitors (93%), diuretics (86%), digoxin (67%) and beta blockers (36%). The mean duration of follow-up was nearly two years. The mean daily dose of Diovan in Val-HeFT was 254 mg. The study had two primary endpoints: all cause mortality (time to death) and composite mortality and heart failure morbidity (time to first morbid event) defined as death, sudden death with resuscitation, hospitalisation for heart failure, or administration of intravenous inotropic or vasodilator agents for four hours or more without hospitalisation.

All cause mortality was similar (p=NS) in the valsartan (19.7%) and placebo (19.4%) groups. The primary benefit was a 27.5% (95% CI: 17 to 37%) reduction in risk for time to first heart failure hospitalisation (13.9% vs. 18.5%). Results appearing to favour placebo (composite mortality and morbidity was 21.9% in placebo vs. 25.4% in valsartan group) were observed for those patients receiving the triple combination of an ACE inhibitor, a beta blocker and valsartan.

In a subgroup of patients not receiving an ACE inhibitor (n=366), the morbidity benefits were greatest. In this subgroup all-cause mortality was significantly reduced with valsartan compared to placebo by 33% (95% CI: -6% to 58%) (17.3% valsartan vs. 27.1% placebo) and the composite mortality and morbidity risk was significantly reduced by 44% (24.9% valsartan vs. 42.5% placebo).

In patients receiving an ACE inhibitor without a beta-blocker, all cause mortality was similar (p=NS) in the valsartan (21.8%) and placebo (22.5%) groups. Composite mortality and morbidity risk was significantly reduced by 18.3% (95% CI: 8% to 28%) with valsartan compared with placebo (31.0% vs. 36.3%).

In the overall Val-HeFT population, valsartan treated patients showed significant improvement in NYHA class, and heart failure signs and symptoms, including dyspnoea, fatigue, oedema and rales compared to placebo. Patients treated with valsartan had a better quality of life as demonstrated by change in the Minnesota Living with Heart Failure Quality of Life score from baseline at endpoint than placebo. Ejection fraction in valsartan treated patients was significantly increased and LVIDD significantly reduced from baseline at endpoint compared to placebo.

Hypertension

Administration of Diovan to patients with hypertension results in reduction of blood pressure without affecting pulse rate.

In most patients, after administration of a single oral dose, onset of antihypertensive activity occurs within 2 hours, and the peak reduction of blood pressure is achieved within 4-6 hours. The antihypertensive effect persists over 24 hours after dosing. During repeated dosing, the antihypertensive effect is substantially present within 2 weeks, and maximal effects are attained within 4 weeks and persist during long-term therapy. Combined with hydrochlorothiazide, a significant additional reduction in blood pressure is achieved.

Abrupt withdrawal of Diovan has not been associated with rebound hypertension or other adverse clinical events.

In hypertensive patients with type 2 diabetes and microalbuminuria, valsartan has been shown to reduce the urinary excretion of albumin. The MARVAL (Micro Albuminuria Reduction with Valsartan) study assessed the reduction in urinary albumin excretion (UAE) with valsartan (80-160 mg/od) versus amlodipine (5-10 mg/od), in 332 type 2 diabetic patients (mean age: 58 years; 265 men) with microalbuminuria (valsartan: 58 µg/min; amlodipine: 55.4 µg/min), normal or high blood pressure and with preserved renal function (blood creatinine <120 µmol/l). At 24 weeks, UAE was reduced (p<0.001) by 42% (-24.2 µg/min; 95% CI: -40.4 to -19.1) with valsartan and approximately 3% (-1.7 µg/min; 95% CI: -5.6 to 14.9) with amlodipine despite similar rates of blood pressure reduction in both groups.

The Diovan Reduction of Proteinuria (DROP) study further examined the efficacy of valsartan in reducing UAE in 391 hypertensive patients (BP=150/88 mmHg) with type 2 diabetes, albuminuria (mean=102 µg/min; 20-700 µg/min) and preserved renal function (mean serum creatinine = 80 µmol/l).

Patients were randomized to one of 3 doses of valsartan (160, 320 and 640 mg/od) and treated for 30 weeks.

The purpose of the study was to determine the optimal dose of valsartan for reducing UAE in hypertensive patients with type 2 diabetes. At 30 weeks, the percentage change in UAE was significantly reduced by 36% from baseline with valsartan 160 mg (95%CI: 22 to 47%), and by 44% with valsartan 320 mg (95%CI: 31 to 54%). It was concluded that 160-320 mg of valsartan produced clinically relevant reductions in UAE in hypertensive patients with type 2 diabetes.

Recent myocardial infarction

The VALsartan In Acute myocardial iNfarcTion trial (VALIANT) was a randomised, controlled, multinational, double-blind study in 14,703 patients with acute myocardial infarction and signs, symptoms or radiological evidence of congestive heart failure and/or evidence of left ventricular systolic dysfunction (manifested as an ejection fraction $\leq 40\%$ by radionuclide ventriculography or $\leq 35\%$ by echocardiography or ventricular contrast angiography). Patients were randomised within 12 hours to 10 days after the onset of myocardial infarction symptoms to valsartan, captopril, or the combination of both. The mean treatment duration was two years. The primary endpoint was time to all-cause mortality.

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There was no difference in all-cause mortality, cardiovascular mortality or morbidity when beta blockers were administered together with the combination of valsartan + captopril, valsartan alone, or captopril alone. Irrespective of treatment, mortality was lower in the group of patients treated with a beta blocker, suggesting that the known beta blocker benefit in this population was maintained in this trial.

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In patients receiving an ACE inhibitor without a beta-blocker, all cause mortality was similar (p=NS) in the valsartan (21.8%) and placebo (22.5%) groups. Composite mortality and morbidity risk was significantly reduced by 18.3% (95% CI: 8% to 28%) with valsartan compared with placebo (31.0% vs. 36.3%). In the overall Val-HeFT population, valsartan treated patients showed significant improvement in NYHA class, and heart failure signs and symptoms, including dyspnoea, fatigue, oedema and rales compared to placebo. Patients treated with valsartan had a better quality of life as demonstrated by change in the Minnesota Living with Heart Failure Quality of Life score from baseline at endpoint than placebo. Ejection fraction in valsartan treated patients was significantly increased and LVDD significantly reduced from baseline at endpoint compared to placebo.

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Paediatric population

Hypertension

The antihypertensive effect of valsartan have been evaluated in four randomized, double-blind clinical studies in 561 paediatric patients from 6 to 18 years of age and 165 paediatric patients 1 to 6 years of age. Renal and urinary disorders, and obesity were the most common underlying medical conditions potentially contributing to hypertension in the children enrolled in these studies.

Clinical experience in children at or above 6 years of age

In a clinical study involving 261 hypertensive paediatric patients 6 to 16 years of age, patients who weighed <35 kg received 10, 40 or 80 mg of valsartan tablets daily (low, medium and high doses), and patients who weighed ≥35 kg received 20, 80, and 160 mg of valsartan tablets daily (low, medium and high doses). At the end of 2 weeks, valsartan reduced both systolic and diastolic blood pressure in a dose-dependent manner. Overall, the three dose levels of valsartan (low, medium and high) significantly reduced systolic blood pressure by 8, 10, 12 mm Hg from the baseline, respectively. Patients were re-randomized to either continue receiving the same dose of valsartan or were switched to placebo. In patients who continued to receive the medium and high doses of valsartan, systolic blood pressure at trough was -4 and -7 mm Hg lower than patients who received the placebo treatment. In patients receiving the low dose of valsartan, systolic blood pressure at trough was similar to that of patients who received the placebo treatment. Overall, the dose-dependent antihypertensive effect of valsartan was consistent across all the demographic subgroups.

In another clinical study involving 300 hypertensive paediatric patients 6 to 18 years of age, eligible patients were randomized to receive valsartan or enalapril tablets for 12 weeks. Children weighing between ≥18 kg and <35 kg received valsartan 80 mg or enalapril 10 mg; those between ≥35 kg and <80 kg received valsartan 160 mg or enalapril 20 mg; those ≥80 kg received valsartan 320 mg or enalapril 40 mg. Reductions in systolic blood pressure were comparable in patients receiving valsartan (15 mmHg) and enalapril (14 mm Hg) (non-inferiority p-value <0.0001). Consistent results were observed for diastolic blood pressure with reductions of 9.1 mmHg and 8.5 mmHg with valsartan and enalapril, respectively.

Clinical experience in children less than 6 years of age

Two clinical studies were conducted in patients aged 1 to 6 years with 90 and 75 patients, respectively. No children below the age of 1 year were enrolled in these studies. In the first study, the efficacy of valsartan was confirmed compared to placebo but a dose-response could not be demonstrated. In the second study, higher doses of valsartan were associated with greater BP reductions, but the dose response trend did not achieve statistical significance and the treatment difference compared to placebo was not significant. Because of these inconsistencies, valsartan is not recommended in this age group (see section 4.8).

The European Medicines Agency has waived the obligation to submit the results of studies with Diovan in all subsets of the paediatric population in heart failure and heart failure after recent myocardial infarction. See section 4.2 for information on paediatric use.

5.2 Pharmacokinetic properties

Absorption:

Following oral administration of valsartan alone, peak plasma concentrations of valsartan are reached in 2–4 hours with tablets and 1–2 hours with solution formulation. Mean absolute bioavailability is 23% and 39% with tablets and solution formulation, respectively. Food decreases exposure (as measured by AUC) to valsartan by about 40% and peak plasma concentration (C_{max}) by about 50%, although from about 8 h post dosing plasma valsartan concentrations are similar for the fed and fasted groups. This reduction in AUC is not, however, accompanied by a clinically significant reduction in the therapeutic effect, and valsartan can therefore be given either with or without food.

Distribution:

The steady-state volume of distribution of valsartan after intravenous administration is about 17 litres, indicating that valsartan does not distribute into tissues extensively. Valsartan is highly bound to serum proteins (94–97%), mainly serum albumin.

Biotransformation:

Valsartan is not biotransformed to a high extent as only about 20% of dose is recovered as metabolites. A hydroxy metabolite has been identified in plasma at low concentrations (less than 10% of the valsartan AUC). This metabolite is pharmacologically inactive.

Excretion:

Valsartan shows multiexponential decay kinetics ($t_{1/2\alpha} < 1$ h and $t_{1/2\beta}$ about 9 h). Valsartan is primarily eliminated by biliary excretion in faeces (about 83% of dose) and renally in urine (about 13% of dose), mainly as unchanged drug. Following intravenous administration, plasma clearance of valsartan is about 2 l/h and its renal clearance is 0.62 l/h (about 30% of total clearance). The half-life of valsartan is 6 hours.

In heart failure patients:

The average time to peak concentration and elimination half-life of valsartan in heart failure patients are similar to that observed in healthy volunteers. AUC and C_{max} values of valsartan are almost proportional with increasing dose over the clinical dosing range (40 to 160 mg twice a day). The average accumulation factor is about 1.7. The apparent clearance of valsartan following oral administration is approximately 4.5 l/h. Age does not affect the apparent clearance in heart failure patients.

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Special populations

Elderly

A somewhat higher systemic exposure to valsartan was observed in some elderly subjects than in young subjects; however, this has not been shown to have any clinical significance.

Impaired renal function

As expected for a compound where renal clearance accounts for only 30% of total plasma clearance, no correlation was seen between renal function and systemic exposure to valsartan. Dose adjustment is therefore not required in patients with renal impairment (creatinine clearance >10 ml/min). There is currently no experience on the safe use in patients with a creatinine clearance <10 ml/min and patients undergoing dialysis, therefore valsartan should be used with caution in these patients (see sections 4.2 and 4.4).

Valsartan is highly bound to plasma protein and is unlikely to be removed by dialysis.

Hepatic impairment

Approximately 70% of the dose absorbed is eliminated in the bile, essentially in the unchanged form. Valsartan does not undergo any noteworthy biotransformation. A doubling of exposure (AUC) was observed in patients with mild to moderate hepatic impairment compared to healthy subjects. However, no correlation was observed between plasma valsartan concentration versus degree of hepatic dysfunction. Diovan has not been studied in patients with severe hepatic dysfunction (see sections 4.2, 4.3 and 4.4).

Paediatric population

In a study of 26 paediatric hypertensive patients (aged 1 to 16 years) given a single dose of a suspension of valsartan (mean: 0.9 to 2 mg/kg, with a maximum dose of 80 mg), the clearance (litres/h/kg) of valsartan was comparable across the age range of 1 to 16 years and similar to that of adults receiving the same formulation.

Impaired renal function

Use in paediatric patients with a creatinine clearance <30 ml/min and paediatric patients undergoing dialysis has not been studied, therefore valsartan is not recommended in these patients. No dose adjustment is required for paediatric patients with a creatinine clearance >30 ml/min. Renal function and serum potassium should be closely monitored (see sections 4.2 and 4.4).

5.3 Preclinical safety data

Non-clinical data reveal no special hazard for humans based on conventional studies of safety pharmacology, repeated dose toxicity, genotoxicity, carcinogenic potential.

In rats, maternally toxic doses (600 mg/kg/day) during the last days of gestation and lactation led to lower survival, lower weight gain and delayed development (pinna detachment and ear-canal opening) in the offspring (see section 4.6). These doses in rats (600 mg/kg/day) are approximately 18 times the maximum recommended human dose on a mg/m² basis (calculations assume an oral dose of 320 mg/day and a 60-kg patient).

In non-clinical safety studies, high doses of valsartan (200 to 600 mg/kg body weight) caused in rats a reduction of red blood cell parameters (erythrocytes, haemoglobin, haematocrit) and evidence of changes in renal haemodynamics (slightly raised plasma urea, and renal tubular hyperplasia and basophilia in males). These doses in rats (200 and 600 mg/kg/day) are approximately 6 and 18 times the maximum recommended human dose on a mg/m² basis (calculations assume an oral dose of 320 mg/day and a 60-kg patient).

In marmosets at similar doses, the changes were similar though more severe, particularly in the kidney where the changes developed to a nephropathy which included raised urea and creatinine.

Hypertrophy of the renal juxtaglomerular cells was also seen in both species. All changes were considered to be caused by the pharmacological action of valsartan which produces prolonged hypotension, particularly in marmosets. For therapeutic doses of valsartan in humans, the hypertrophy of the renal juxtaglomerular cells does not seem to have any relevance.

Paediatric population

Daily oral dosing of neonatal/juvenile rats (from a postnatal day 7 to postnatal day 70) with valsartan at doses as low as 1 mg/kg/day (about 10-35% of the maximum recommended paediatric dose of 4 mg/kg/day on systemic exposure basis) produced persistent, irreversible kidney damage. These effects above mentioned represent an expected exaggerated pharmacological effect of angiotensin converting enzyme inhibitors and angiotensin II type 1 blockers; such effects are observed if rats are treated during the first 13 days of life. This period coincides with 36 weeks of gestation in humans, which could occasionally extend up to 44 weeks after conception in humans. The rats in the juvenile valsartan study were dosed up to day 70, and effects on renal maturation (postnatal 4-6 weeks) cannot be excluded. Functional renal maturation is an ongoing process within the first year of life in humans. Consequently, a clinical relevance in children <1 year of age cannot be excluded, while preclinical data do not indicate a safety concern for children older than 1 year.

6. PHARMACEUTICAL PARTICULARS

6.1 List of excipients

[To be completed nationally]

6.2 Incompatibilities

[To be completed nationally]

6.3 Shelf life

[To be completed nationally]

6.4 Special precautions for storage

[To be completed nationally]

6.5 Nature and contents of container

[To be completed nationally]

6.6 Special precautions for disposal

No special requirements.

7. MARKETING AUTHORISATION HOLDER

[See Annex I - To be completed nationally]

8. MARKETING AUTHORISATION NUMBER

[To be completed nationally]

9. DATE OF FIRST AUTHORISATION/RENEWAL OF THE AUTHORISATION

[To be completed nationally]

10. DATE OF REVISION OF THE TEXT

[To be completed nationally]

PACKAGE LEAFLET

PACKAGE LEAFLET: INFORMATION FOR THE USER

Diovan and associated names (see Annex I) 40 mg film-coated tablets

Diovan and associated names (see Annex I) 80 mg film-coated tablets

Diovan and associated names (see Annex I) 160 mg film-coated tablets

Diovan and associated names (see Annex I) 320 mg film-coated tablets

[See Annex I -To be completed nationally]

Valsartan

Read all of this leaflet carefully before you start taking this medicine.

- Keep this leaflet. You may need to read it again.
- If you have any further questions, ask your doctor or pharmacist.
- This medicine has been prescribed for you. Do not pass it on to others. It may harm them, even if their symptoms are the same as yours.
- If any of the side effects gets serious, or if you notice any side effects not listed in this leaflet, please tell your doctor or pharmacist.

In this leaflet:

1. What Diovan is and what it is used for
2. Before you take Diovan
3. How to take Diovan
4. Possible side effects
5. How to store Diovan
6. Further information

1. WHAT DIOVAN IS AND WHAT IT IS USED FOR

Diovan belongs to a class of medicines known as angiotensin II receptor antagonist, which help to control high blood pressure. Angiotensin II is a substance in the body that causes vessels to tighten, thus causing your blood pressure to increase. Diovan works by blocking the effect of angiotensin II. As a result, blood vessels relax and blood pressure is lowered.

Diovan 40 mg film-coated tablets **can be used for three different conditions:**

- **to treat high blood pressure in children and adolescents 6 to 18 years of age.** High blood pressure increases the workload on the heart and arteries. If not treated it can damage the blood vessels of the brain, heart, and kidneys, and may result in a stroke, heart failure, or kidney failure. High blood pressure increases the risk of heart attacks. Lowering your blood pressure to normal reduces the risk of developing these disorders.
- **to treat adult patients after a recent heart attack** (myocardial infarction). “Recent” here means between 12 hours and 10 days.
- **to treat symptomatic heart failure in adult patients.** Diovan is used when a group of medicines called Angiotensin Converting Enzyme (ACE) inhibitors (a medication to treat heart failure) cannot be used or it may be used in addition to ACE inhibitors when beta blockers (another medication to treat heart failure) cannot be used.
Heart failure symptoms include shortness of breath, and swelling of the feet and legs due to fluid build-up. It is caused when the heart muscle cannot pump blood strongly enough to supply all the blood needed throughout the body.

Diovan 80 mg film-coated tablets **can be used for three different conditions:**

- **to treat high blood pressure in adult and in children and adolescents 6 to 18 years of age.** High blood pressure increases the workload on the heart and arteries. If not treated it can damage the blood vessels of the brain, heart, and kidneys, and may result in a stroke, heart failure, or kidney failure.

High blood pressure increases the risk of heart attacks. Lowering your blood pressure to normal reduces the risk of developing these disorders.

- **to treat adult patients after a recent heart attack** (myocardial infarction). “Recent” here means between 12 hours and 10 days.
- **to treat symptomatic heart failure in adult patients.** Diovan is used when a group of medicines called Angiotensin Converting Enzyme (ACE) inhibitors (a medication to treat heart failure) cannot be used or it may be used in addition to ACE inhibitors when beta blockers (another medication to treat heart failure) cannot be used.

Heart failure symptoms include shortness of breath, and swelling of the feet and legs due to fluid build-up. It is caused when the heart muscle cannot pump blood strongly enough to supply all the blood needed throughout the body.

Diovan 160 mg film-coated tablets **can be used for three different conditions:**

- **to treat high blood pressure in adult and in children and adolescents 6 to 18 years of age.** High blood pressure increases the workload on the heart and arteries. If not treated it can damage the blood vessels of the brain, heart, and kidneys, and may result in a stroke, heart failure, or kidney failure. High blood pressure increases the risk of heart attacks. Lowering your blood pressure to normal reduces the risk of developing these disorders.
- **to treat adult patients after a recent heart attack** (myocardial infarction). “Recent” here means between 12 hours and 10 days.
- **to treat symptomatic heart failure in adult patients.** Diovan is used when a group of medicines called Angiotensin Converting Enzyme (ACE) inhibitors (a medication to treat heart failure) cannot be used or it may be used in addition to ACE inhibitors when beta blockers (another medication to treat heart failure) cannot be used.

Heart failure symptoms include shortness of breath, and swelling of the feet and legs due to fluid build-up. It is caused when the heart muscle cannot pump blood strongly enough to supply all the blood needed throughout the body.

Diovan 320 mg film-coated tablets **can be used**

- **to treat high blood pressure in adults and in children and adolescents 6 to 18 years of age.** High blood pressure increases the workload on the heart and arteries. If not treated it can damage the blood vessels of the brain, heart, and kidneys, and may result in a stroke, heart failure, or kidney failure. High blood pressure increases the risk of heart attacks. Lowering your blood pressure to normal reduces the risk of developing these disorders.

2. BEFORE YOU TAKE DIOVAN

Do not take Diovan:

- if you are **allergic** (hypersensitive) to valsartan or any of the other ingredients of Diovan listed at the end of this leaflet.
- if you have **severe liver disease**.
- if you are **more than 3 months pregnant** (it is also better to avoid Diovan in early pregnancy - see pregnancy section).

If any of these apply to you, do not take Diovan

Take special care with Diovan:

- if you have liver disease.
- if you have severe kidney disease or if you are undergoing dialysis.
- if you are suffering from a narrowing of the kidney artery.
- if you have recently undergone kidney transplantation (received a new kidney).
- if you are treated after a heart attack or for heart failure, your doctor may check your kidney function.
- if you have severe heart disease other than heart failure or heart attack.

- if you are taking medicines that increase the amount of potassium in your blood. These include potassium supplements or salt substitutes containing potassium, potassium-sparing medicines and heparin. It may be necessary to check the amount of potassium in your blood at regular intervals.
- if you are below 18 years of age and you take Diovan in combination with other medicines that inhibit the renin angiotensin aldosterone system (medicines that lower blood pressure), your doctor may check your kidney function and the amount of potassium in your blood at regular intervals.
- if you suffer from aldosteronism. This is a disease in which your adrenal glands make too much of the hormone aldosterone. If this applies to you, the use of Diovan is not recommended.
- if you have lost a lot of fluid (dehydration) caused by diarrhoea, vomiting, or high doses of water tablets (diuretics).
- you must tell your doctor if you think you are (or might become) pregnant. Diovan is not recommended in early pregnancy, and must not be taken if you are more than 3 months pregnant, as it may cause serious harm to your baby if used at that stage (see pregnancy section).

If any of these apply to you, tell your doctor before you take Diovan.

Taking other medicines

Please tell your doctor or pharmacist if you are taking or have recently taken any other medicines, including medicines obtained without a prescription.

The effect of the treatment can be influenced if Diovan is taken together with certain other medicines. It may be necessary to change the dose, to take other precautions, or in some cases to stop taking one of the medicines. This applies to both prescription and non-prescription medicines, especially:

- **other medicines that lower blood pressure**, especially **water tablets** (diuretics).
- **medicines that increase the amount of potassium** in your blood. These include potassium supplements or salt substitutes containing potassium, potassium-sparing medicines and heparin.
- **certain type of pain killers** called non-steroidal anti-inflammatory medicines (**NSAIDs**).
- **lithium**, a medicine used to treat some types of psychiatric illness.

In addition:

- if you are being **treated after a heart attack**, a combination with **ACE inhibitors** (a medication to treat heart attack) is not recommended.
- if you are being **treated for heart failure**, a triple combination with **ACE inhibitors and beta blockers** (medications to treat heart failure) is not recommended.

In addition:

- if you are being **treated after a heart attack**, a combination with **ACE inhibitors** (a medication to treat heart attack) is not recommended.
- if you are being **treated for heart failure**, a triple combination with **ACE inhibitors and beta blockers** (medications to treat heart failure) is not recommended.

In addition:

- if you are being **treated after a heart attack**, a combination with **ACE inhibitors** (a medication to treat heart attack) is not recommended.
- if you are being **treated for heart failure**, a triple combination with **ACE inhibitors and beta blockers** (medications to treat heart failure) is not recommended.

Taking Diovan with food and drink

You can take Diovan with or without food.

Pregnancy and breast-feeding

Ask your doctor or pharmacist for advice before taking any medicine.

- **You must tell your doctor if you think that you are (or might become) pregnant.** Your doctor will normally advise you to stop taking Diovan before you become pregnant or as soon as you know you are pregnant, and will advise you to take another medicine instead of Diovan. Diovan is not recommended in early pregnancy, and must not be taken when more than 3 months pregnant, as it may cause serious harm to your baby if it is used after the third month of pregnancy.
- **Tell your doctor if you are breast-feeding or about to start breast-feeding.** Diovan is not recommended for mothers who are breast-feeding, and your doctor may choose another treatment for you if you wish to breast-feed, especially if your baby is newborn, or was born prematurely.

Driving and using machines

Before you drive a vehicle, use tools or operate machines, or carry out other activities that require concentration, make sure you know how Diovan affects you. Like many other medicines used to treat high blood pressure, Diovan may in rare cases cause dizziness and affect the ability to concentrate.

Important information about some of the ingredients of Diovan

[To be completed nationally]

3. HOW TO TAKE DIOVAN

Always take Diovan exactly as your doctor has told you in order to get the best results and reduce the risk of side effects. You should check with your doctor or pharmacist if you are not sure. People with high blood pressure often do not notice any signs of this problem. Many may feel quite normal. This makes it all the more important for you to keep your appointments with the doctor even if you are feeling well.

Children and adolescents (6 to 18 years of age) with high blood pressure

In patients who weigh less than 35 kg the usual dose is 40 mg of valsartan once daily.

In patients who weigh 35 kg or more the usual starting dose is 80 mg of valsartan once daily.

In some cases your doctor may prescribe higher doses (the dose can be increased to 160 mg and to a maximum of 320 mg).

Adult patients after a recent heart attack: After a heart attack the treatment is generally started as early as after 12 hours, usually at a low dose of 20 mg twice daily. You obtain the 20 mg dose by dividing the 40 mg tablet. Your doctor will increase this dose gradually over several weeks to a maximum of 160 mg twice daily. The final dose depends on what you as an individual patient can tolerate.

Diovan can be given together with other treatment for heart attack, and your doctor will decide which treatment is suitable for you.

Adult patients with heart failure: Treatment starts generally with 40 mg twice daily. Your doctor will increase the dose gradually over several weeks to a maximum of 160 mg twice daily. The final dose depends on what you as an individual patient can tolerate.

Diovan can be given together with other treatment for heart failure, and your doctor will decide which treatment is suitable for you.

Adult patients with high blood pressure: The usual dose is 80 mg daily. In some cases your doctor may prescribe higher doses (e.g. 160 mg or 320 mg). He may also combine Diovan with an additional medicine (e.g. a diuretic).

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Diovan can be given together with other treatment for heart attack, and your doctor will decide which treatment is suitable for you.

Adult patients with heart failure: Treatment starts generally with 40 mg twice daily. Your doctor will increase the dose gradually over several weeks to a maximum of 160 mg twice daily. The final dose depends on what you as an individual patient can tolerate.

Diovan can be given together with other treatment for heart failure, and your doctor will decide which treatment is suitable for you.

Adult patients with high blood pressure: The usual dose is 80 mg daily. In some cases your doctor may prescribe higher doses (e.g. 160 mg or 320 mg). He may also combine Diovan with an additional medicine (e.g. a diuretic).

Children and adolescents (6 to 18 years of age) with high blood pressure

In patients who weigh less than 35 kg the usual dose is 40 mg of valsartan once daily.

In patients who weigh 35 kg or more the usual starting dose is 80 mg of valsartan once daily.

In some cases your doctor may prescribe higher doses (the dose can be increased to 160 mg and to a maximum of 320 mg).

You can take Diovan with or without food. Swallow Diovan with a glass of water.

Take Diovan at about the same time each day.

If you take more Diovan than you should

If you experience severe dizziness and/or fainting, contact your doctor immediately and lie down. If you have accidentally taken too many tablets, contact your doctor, pharmacist, or hospital.

If you forget to take Diovan

If you forget to take a dose, take it as soon as you remember. However, if it is almost time for your next dose, skip the dose you missed.

Do not take a double dose to make up for a forgotten dose.

If you stop taking Diovan

Stopping your treatment with Diovan may cause your disease to get worse. Do not stop taking your medicine unless your doctor tells you to.

If you have further questions on the use of this product, ask your doctor or pharmacist.

4. POSSIBLE SIDE EFFECTS

Like all medicines, Diovan can cause side effects, although not everybody gets them.

These side effects may occur with certain frequencies, which are defined as follows:

- very common: affects more than 1 user in 10
- common: affects 1 to 10 users in 100
- uncommon: affects 1 to 10 users in 1,000
- rare: affects 1 to 10 users in 10,000
- very rare: affects less than 1 user in 10,000
- not known: frequency cannot be estimated from the available data.

Some symptoms need immediate medical attention:

You may experience symptoms of angioedema (a specific allergic reaction), such as

- swollen face, lips, tongue or throat
- difficulty in breathing or swallowing
- hives, itching

If you get any of these, see a doctor immediately.

Side effects include:**Common**

- dizziness
- low blood pressure with or without symptoms such as dizziness and fainting when standing up
- decreased kidney function (signs of renal impairment)

Uncommon

- angioedema (see section “Some symptoms need immediate medical attention”)
- sudden loss of consciousness (syncope)
- spinning sensation (vertigo)
- severely decreased kidney function (signs of acute renal failure)
- muscle spasms, abnormal heart rhythm (signs of hyperkalaemia)
- breathlessness, difficulty breathing when lying down, swelling of the feet or legs (signs of cardiac failure)
- headache

- cough
- abdominal pain
- nausea
- diarrhoea
- tiredness
- weakness

Not known

- allergic reactions with rash, itching and hives; symptoms of fever, swollen joints and joint pain, muscle pain, swollen lymph nodes and/or flu-like symptoms may occur (signs of serum sickness)
- purplish-red spots, fever, itching (signs of inflammation of blood vessels also called vasculitis)
- unusual bleeding or bruising (signs of thrombocytopenia)
- muscle pain (myalgia)
- fever, sore throat or mouth ulcers due to infections (symptoms of low level of white blood cells also called neutropenia)
- decrease of level of haemoglobin and decrease of the percentage of red blood cells in the blood (which can lead to anaemia in severe cases)
- increase of level of potassium in the blood (which can trigger muscle spasms and abnormal heart rhythm in severe cases)
- elevation of liver function values (which can indicate liver damage) including an increase of bilirubin in the blood (which can trigger yellow skin and eyes in severe cases)
- increase of level of blood urea nitrogen and increase of level of serum creatinine (which can indicate abnormal kidney function)

The frequency of some side effects may vary depending on your condition. For example, side effects such as dizziness, and decreased kidney function, were seen less frequently in adult patients treated with high blood pressure than in adult patients treated for heart failure or after a recent heart attack.

Side effects in children and adolescents are similar to those seen in adults.

If any of the side effects gets serious, or if you notice any side effects not listed in this leaflet, please tell your doctor or pharmacist.

5. HOW TO STORE DIOVAN

- [Storage conditions statements - To be completed nationally]
- Keep out of the reach and sight of children.
- Do not use Diovan after the expiry date which is stated on the pack. The expiry date refers to the last day of that month.
- Do not use Diovan if you notice that the pack is damaged or shows signs of tampering.
- Medicines should not be disposed of via wastewater or household waste. Ask your pharmacist how to dispose of medicines no longer required. These measures will help to protect the environment.

6. FURTHER INFORMATION

What Diovan contains

[To be completed nationally]

What Diovan looks like and contents of the pack

[To be completed nationally]

Not all pack sizes may be marketed

Marketing Authorisation Holder and Manufacturer

[See Annex I - To be completed nationally]

For any information about this medicine, please contact the Marketing Authorisation Holder.

This leaflet was last approved in

This medicinal product is authorised in the Member States of the EEA under the following names:

[To be completed nationally]

ANNEX III
CONDITIONS OF THE MARKETING AUTHORISATION

The National Health Authorities shall ensure the following conditions are fulfilled by the Marketing Authorisation Holder:

The Applicant commits to the following:

- Submit a Risk Management Plan (or its update) for Diovan at National level, taking into account the new paediatric data and the CHMP recommendations. The Risk Management Plan should include the following:
 - In the safety specification:
 - results of juvenile safety studies regarding the risk of nephrotoxicity and its relevance for the use in the different paediatric groups
 - paediatric exposure in clinical trials and in post marketing use by age group, indication (including off label use), dose, duration of use, gender and ethnicity
 - As safety concerns:
 - Identified risks: hyperkalemia and hypotension.
 - Potential risks: renal impairment, elevation of liver function values, hypersensitivity including angioedema and serum sickness, hemoglobin/hematocrit decreased and medication error including overdose.
 - Missing information: clinical management and use of pharmacotherapy in paediatric heart failure, paediatric recent myocardial infarction, paediatric hypertension with renal impairment (GFR < 30 mL/min) and paediatric hypertension with mild to moderate hepatic impairment.
 - Use in children under 6 years of age.
 - Need for dose adaptation when switching between oral solution and tablets.
 - In the pharmacovigilance plan:
 - Targeted checklists for follow up of adverse events listed above as potential risks in the paediatric population
 - A study primarily aimed at establishing the long-term safety in CKD and non-CKD paediatric patients. The protocol of the study will be submitted by the applicant in the second quarter of 2010 for agreement with the CHMP with input from the PDCO. The study report will be finalized by the first quarter of 2014.
 - A physician survey of clinical management and uses of medicinal products in pediatric patients with heart failure. The final study report should be submitted by the last quarter of 2010.
 - A long term study in the younger age group (1 to 5 years old). The applicant will initiate a scientific dialogue via the CHMP's Scientific Advice with the involvement of the PDCO for protocol assistance with the aim of gaining further insight on a hypertensive clinical trial in younger children with valsartan and to define objectives and design parameters in investigating the efficacy in this population. When a viable and mutually agreed study plan emerges from the dialogue, a new study will be initiated within one year.
 - A comparative bioavailability study confirming the relative dosing of the tablets and oral solution should be carried out. The study report will be finalized by Q4 2010.
- Restart the cycle of PSUR submission for Diovan as follows:
 - Six-monthly PSURs until two full years of experience with the paediatric indication in the EU has been gained
 - Yearly PSURs for the following two years
 - Thereafter submission at 3-yearly intervalsThe PSURs should focus on the use in the paediatric population.