

Annex II

Conditions to the marketing authorisation(s)

Conditions to the MA	Due date																																				
The MAH must ensure that the manufacturing processes of the drug substances used for their drug products are reviewed for the potential risk of formation of N-nitrosamines and changed as necessary to minimise nitrosamine contamination as much as possible.	Within 2 years after Commission Decision																																				
For all N-nitrosamines the MAH must ensure a control strategy is in place in drug substance batches used for their drug products.	At the time of Commission Decision																																				
<p data-bbox="164 528 1150 595">For N-nitrosodimethylamine (NDMA) and N nitrosodiethylamine (NDEA) the MAH must introduce the following specifications for the drug substance:</p> <p data-bbox="164 618 1070 685">1) Limits for NDMA and NDEA outlined below should be implemented for a transitional period of 2 years:</p> <table border="1" data-bbox="164 701 1174 981"> <thead> <tr> <th data-bbox="164 701 363 819">Drug substance*</th> <th data-bbox="363 701 520 819">Max. daily dose (mg)</th> <th data-bbox="520 701 676 819">NDEA Limit in ng/day</th> <th data-bbox="676 701 833 819">NDEA Limit in ppm in API</th> <th data-bbox="833 701 989 819">NDMA Limit in ng/day</th> <th data-bbox="989 701 1174 819">NDMA Limit in ppm in API</th> </tr> </thead> <tbody> <tr> <td data-bbox="164 819 363 853">Valsartan</td> <td data-bbox="363 819 520 853">320</td> <td data-bbox="520 819 676 853">26.5</td> <td data-bbox="676 819 833 853">0.082</td> <td data-bbox="833 819 989 853">96.0</td> <td data-bbox="989 819 1174 853">0.300</td> </tr> <tr> <td data-bbox="164 853 363 887">Losartan</td> <td data-bbox="363 853 520 887">150</td> <td data-bbox="520 853 676 887">26.5</td> <td data-bbox="676 853 833 887">0.177</td> <td data-bbox="833 853 989 887">96.0</td> <td data-bbox="989 853 1174 887">0.640</td> </tr> <tr> <td data-bbox="164 887 363 920">Olmesartan</td> <td data-bbox="363 887 520 920">40</td> <td data-bbox="520 887 676 920">26.5</td> <td data-bbox="676 887 833 920">0.663</td> <td data-bbox="833 887 989 920">96.0</td> <td data-bbox="989 887 1174 920">2.400</td> </tr> <tr> <td data-bbox="164 920 363 954">Irbesartan</td> <td data-bbox="363 920 520 954">300</td> <td data-bbox="520 920 676 954">26.5</td> <td data-bbox="676 920 833 954">0.088</td> <td data-bbox="833 920 989 954">96.0</td> <td data-bbox="989 920 1174 954">0.320</td> </tr> <tr> <td data-bbox="164 954 363 981">Candesartan</td> <td data-bbox="363 954 520 981">32</td> <td data-bbox="520 954 676 981">26.5</td> <td data-bbox="676 954 833 981">0.820</td> <td data-bbox="833 954 989 981">96.0</td> <td data-bbox="989 954 1174 981">3.000</td> </tr> </tbody> </table> <p data-bbox="164 992 1137 1093">* These limits are not applicable for batches where more than one of the above N-nitrosamines has been identified simultaneously; such batches should be rejected.</p> <p data-bbox="164 1234 1174 1301">2) After the transitional period of 2 years, a limit for NDMA and NDEA of maximum 0.03 ppm should be implemented.</p>	Drug substance*	Max. daily dose (mg)	NDEA Limit in ng/day	NDEA Limit in ppm in API	NDMA Limit in ng/day	NDMA Limit in ppm in API	Valsartan	320	26.5	0.082	96.0	0.300	Losartan	150	26.5	0.177	96.0	0.640	Olmesartan	40	26.5	0.663	96.0	2.400	Irbesartan	300	26.5	0.088	96.0	0.320	Candesartan	32	26.5	0.820	96.0	3.000	<p data-bbox="1200 528 1374 595">At the time of Commission Decision</p> <p data-bbox="1200 1189 1355 1301">Within 2 years after Commission Decision</p>
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