Curriculum Vitae

Personal information

Valentina Salvati

Work experience

1. Employer: Italian National Institute of Health (Istituto Superiore di Sanità -ISS)

- Start date: 102018
- End date: present
- Position: Researcher
- Activities: Expert in charge of analytical activities for human bacterial vaccines control performed under OCABR (EU/non EU) and post-marketing surveillance at national level (batch release testing for diphtheria, tetanus and meningococcal vaccines -glycoconjugate and r-proteins). Responsible to set up biological assays in vitro and in vivo to evaluate the potency of vaccines. Responsible to verify the summary report sent by vaccine manufacturers for each vaccine batch. Participation as a Member of the Italian OMCL, Group Unit of Bacterial Vaccines, to annual OMCL meetings and manufacturer/OMCL discussion. Member of the OMCL Drafting Group for Vaccines (Group 15), European Directorate for the Quality of Medicines (since 2023). Designated Member of the Animal Welfare Organism of Istituto Superiore Di Sanità (ISS) (2022-ongoing). Designated Expert at the Istituto Superiore di Sanità (ISS) in evaluating experimental protocols involving animal use (2015-ongoing). Involvement in international collaborative studies for the application of 3Rs principle.
- Country: Italy

2. Employer: Italian National Institute of Health (ISS)/ Università Cattolica del Sacro Cuore

- Start date: 052016
- End date: 102018
- Position: : Post-doc Researcher
- Activities: Planning and execution of research projects on oncology (in vitro and in vivo preclinical models on stem cell and cancer stem cells).

Research activity: AIRC 5x1000 project on "Development of effective cancer therapies based on functional proteomics and cancer stem cell targeting": preclinical validation of innovative formulations of Fenretinide (Nano-Fenretinide and Bio-Nano Fenretinide) for the treatment of lung cancer and glioblastoma multiforme.

Research activity: Italian Cystic Fibrosis research Foundation project on "Establishment of Conditionally Reprogrammed Airway Epithelial Stem Cell cultures from nasal epithelia of Cystic Fibrosis patients: exploring response to CFTR-modulating drugs for correlation with genetic profile (theratyping) and restoring CFTR function through gene editing approaches".

- Country: Italy

3. Employer: Italian National Institute of Health (ISS)/ Regina Elena (IFO/IRE)research centre/hospital

- Start date: 122014
- End date: 032016
- Position: Post-doc Researcher
- Activities: Oncology

Research activity: AIRC 5x1000 project on "Development of effective cancer therapies based on functional proteomics and cancer stem cell targeting": isolation and characterization of cancer stem cells from different cancer biopsy samples and validation of innovative therapeutic targets against lung cancer stem cells in vitro and in lung cancer stem cell-derived xenografts. Generation and identification of monoclonal antibodies against surface antigens of lung cancer stem cells.

- Country: Italy

Education and training

1. Subject: Università degli Studi di Catania

- Start date:2011
- End date: 2014
- Qualification: PhD in "Translational Biomedicine"
- Skills: Oncology: development of effective lung cancer therapies based on lung cancer stem cells targeting
- Organisation:Department of Hematology, Oncology and Molecular Medicine (OMM), Istituto Superiore di Sanità (ISS)
- Country: Italy

2. Subject: Università di Roma "La Sapienza"

- Start date: 2009
- End date: 2011

- Qualification: Master Degree (2 years) in Molecular, Cellular and Medical Biotechnologies
- Skills: Isolation and characterization of melanoma cancer stem cells for the study of antitumor therapeutic targets
- Organisation: Department of Hematology, Oncology and Molecular Medicine (OMM), Istituto Superiore di Sanità (ISS)
- Country: Italy

3. Subject: Università di Roma "La Sapienza"

- Start date: 2006
- End date: 2009
- Qualification: Bachelor Degree (3 years) in Biotechnologies
- Skills: Isolation and characterization of lung cancer stem cells
- Organisation: Department of Hematology, Oncology and Molecular Medicine (OMM), Istituto Superiore di Sanità (ISS)
- Country: Italy

Additional information

Publications

1.Sette G., Lo Cicero S., Blaconà G., Pierandrei S., Bruno S., **Salvati V**., Castelli G., Falchi M., Cucchiara S., Cimino G., De Maria R., Biffoni M., Eramo A., Lucarelli M. Theratyping cystic fibrosis in vitro in ALI-culture and organoid models generated from patient-derived nasal epithelial Conditionally reprogrammed Stem Cells . Eur Respir J 2021 Dec 2; 58 (6):2100908.

2. Orienti I*, **Salvati V***, Sette G*, Zucchetti M, Bongiorno-Borbone L, Peschiaroli A, Zolla L, Francescangeli F, Ferrari M, Matteo C, Bello E, Di Virgilio A, Falchi M, De Angelis ML, Baiocchi M, Melino G, De Maria R, Zeuner A, Eramo A.A. Novel oral micellar fenretinide formulation with enhanced bioavailability and antitumour activity against multiple tumours from cancer stem cells. J Exp Clin Cancer Res. 2019 Aug 22;38(1):373. ***These Authors contributed equally to the manuscript.**

3. Orienti I., Francescangeli F., Fecchi K., Bongiorno L., De Angelis ML., Signore M.,Peschiaroli A., Boe A., Bruselles A., Costantino A., Eramo A., Sette G., **Salvati V**., Contavalli P., Oki, Kitamura, Zolla L., Baiocchi M., Melino G., Tartaglia M., Ruggero De Maria, Ann Zeuner. A new biocompatible fenretinide formulation induces cancer stem cell quiescence and death. Cell Death Dis. 2019 Jul 23;10(7):529.

4. Sette G.*, **Salvati V.***, Giordani I., Pilozzi E., Quacquarini D., Duranti E., De Nicola F., Pallocca M., Fanciulli M., Falchi M., Pallini R., De Maria R., Eramo A. Conditionally reprogrammed cells (CRC) methodology does not allow the in vitro expansion of patient-derived primary and metastatic lung cancer cells. Int J Cancer 2018 Jan 17. ***These Authors contributed equally to the manuscript.**

5. Po A., Silvano M., Miele E., Capalbo C., Eramo A., **Salvati V**., Todaro M., Besharat ZM., Catanz aro G., Cucchi D., Coni S., Di Marcotullio L., Canettieri G., Vacca A., Stassi G., De Smaele E., Ta rtaglia M., Screpanti I., De Maria R., Ferretti E. Non canonical GLI1 signaling promotes stemness features and in vivo growth in lung adenocarcinoma. Oncogene 2017 Aug 10;36(32):4641-4652.

6. Sette G*., **Salvati V.***, Mottolese M., Visca P., Gallo G., Fecchi K., Pilozzi E., Duranti E., Policicchio E., Tartaglia M., Milella M., De Maria R., and Eramo A. Tyr1068-phosphorylated epidermal growthfactor receptor (EGFR) predicts cancer stem cell targeting by erlotinib in preclinical models of wild type-EGFR lung cancer. Cell Death Dis. 2015 Aug 6;6: e1850. ***These Authors contributed equally to the manuscript.**

7. Sette G., Fecchi K., **Salvati V.**, Lotti F., Pilozzi E., Duranti E., Biffoni M., Pagliuca A., Martinetti D., Memeo L., Milella M., De Maria R., Eramo A. Mek inhibition results in marked antitumor activity against metastatic melanoma patient-derived melanospheres and in melanosphere-generated xenografts. Journal of Experimental & Clinical Cancer Research 2013 Nov 16;32:91.

8. Sette G., **Salvati V.,** Memeo L., Fecchi K., Colarossi C., Di Matteo P., Signore M., Biffoni M., D'Andrea V., De Antoni E., Canzonieri V., De Maria R., Eramo A. EGFR inhibition abrogates leiomyosarcoma cell chemoresistance through inactivation of survival pathways and impairment of CSC
potential. PLoS One 2012;7(10): e46891.

-Technical publications:

1. Innovative replacement methods at the Istituto Superiore di Sanità in the spirit of the 3Rs principle; Rapporti ISTISAN, 22/18
2. EU Batch Release Procedure Human Vaccine Annual Report 2019; Rapporti ISTISAN, 20/3
3. EU Batch Release Procedure Human Vaccine Annual Report 2018; Rapporti ISTISAN, 19/2

Projects

1. Participation to the international Research Project Vac2Vac "Vaccine batch to vaccine batch comparison by consistency approach" (2016-2022, IMI2 funded project), WP05 "Pre-Validation" (setting of criteria for method development and validation, collaborative studies incl. novel design, training) as member of the Italian OMCL; in particular, participated to the ring test to assess the validity of the novel ELISA set up to replace the in vivo potency test for tick-born encephalitis vaccine inactivated (TBEV) (2019-2022).
2. Participation in the analysis of data in the NIIMBL project" International in-house validation of the Pertussis Serological Potency Test (PSPT) in mice to replace the in vivo challenge Mouse Protection Test of whole-cell Pertussis (wP) vaccine batch testing"granted to the Manufacturers of the DCVMN (Developing Country Vaccine Manufacturers Network)(2021-2022). (Manuscript in preparation for submission)
3. Scientific Responsible of Research Projects about animal testing (ISS): a) "Dosaggio dell'attività biologica (Potency) in vaccini umani contenenti anatossina difterica per il Controllo di Stato" (2020- 2025); b) Dosaggio dell'attività biologica (Potency) in vaccini umani contenenti anatossina tetanica per il Controllo di Stato" (2019- 2024).
4. Collaborator in the Italian Cystic Fibrosis research Foundation project on "Establishment of Conditionally Reprogrammed Airway Epithelial Stem Cell cultures from nasal epithelia of Cystic Fibrosis patients: exploring response to CFTR-modulating drugs for correlation with genetic profile (theratyping) and restoring CFTR function through gene editing approaches (2018-2021).

Memberships

- Expert of the Group 15 of European Pharmacopeia (Human vaccines).
- Designated Member of the Animal Welfare Organism of Istituto Superiore di Sanità (ISS) (Decree Pres. ISS n°. 44-22).
- Designated Expert at the Istituto Superiore di Sanità (ISS) in evaluating experimental protocols involving animal use.

Invitation as a speaker/ teacher:

- 2023 Teacher at the Master in Biopharmaceuticals (2ND LEVEL MASTER IN DEVELOPMENT,MANUFACTURING AND AUTHORIZATIONS IN BIOPHARMACEUTICALS Università degli studi di Modena e Reggio Emilia. Teaching details: The 3Rs concept in research and quality control testing of biological products.
- 2021 Speaker at the seminar "3Rs in the Quality Control of Human Vaccines, state of the art 2021": seminar held at the 3Rs (CoRi) working group set up at the Istituto Superiore di Sanità.
- 2021 Speaker at the seminar "3R in the Quality Control of Human Vaccines": internal seminars held at the Istituto Superiore di Sanità.

Other Relevant Information

-Courses:

2022 Implementing the 3Rs in WHO guidelines – understanding the impact on quality control and batch release testing of biologicals in Europe (Webinar Session)

2021 “Novel in vitro model as alternative to in vivo toxoid vaccines testing”’ EDQM (Webinar Session)

2021 working group 3Rs at ISS. (Webinar Session)

2020 WHO training on the establishment of single dilution potency assays (Webinar Session)

2019 EUROPEAN OMCL NETWORK (EDQM) OCABR: Workshop on Potency Testing of DTaP Combined Vaccines: Switching from Challenge Test to Serology Assay (Webinar Session)

2019 DCVMN-INTRAVACC-WHO on proposal to advance with whole cell pertussis (wP) testing (Webinar Session)

2019 Seminar “Non Animal Methodologies (NAMs): research, testing, assessment and applications”. ISS

2016 Conference "Animal protection and quality of science". ISS

-Competence in animal experimentation certified by the Federation of European Laboratory Animal Science Associations (FELASA) (category C certification).

-Theoretical and practical training course for personnel working with laboratory animals (ISS).

-High specialization course in Regulatory Affairs. ALMA LABORIS - Rome