

The non-profit **Buzzi Unicem Foundation** was established in 2003 by Buzzi Unicem SpA in Casale Monferrato to promote and support activities aimed at improving the diagnosis and treatment of malignant mesothelioma, a particularly aggressive tumor associated with exposure to asbestos. Although not very widespread throughout the world, this very serious disease is a social phenomenon with extremely grave consequences in the Casale area, which was formerly a center of the asbestos industry.

The Foundation fulfills its charter regarding the research, diagnosis and treatment of mesothelioma by funding projects proposed by researchers from universities, research institutes and hospitals in the following areas:

- Scientific research in preventive measures
- Patient interventions aimed at early diagnosis and treatment

The Foundation is involved with the public sector by funding projects that promote the sharing of ideas, experience and resources that can help get the right solutions to the clinic, the ideal link between science and the patient.

On its website [www.fondazionebuzziunicem.org](http://www.fondazionebuzziunicem.org) a bibliographic review is published and updated twice a year. Moreover the e-mail address [info@fondazionebuzziunicem.org](mailto:info@fondazionebuzziunicem.org) is available.

### The **Scientific Board**

Since 2015, the Buzzi Unicem Foundation has changed the way it supports malignant pleural mesothelioma (MPM) research.

Leveraging its multidisciplinary expertise, the Scientific Committee (SC) will identify research topics aimed at finding new treatments for MPM.

The research topics defined by the SC will be listed on the Buzzi Unicem Foundation website and all the research groups involved will be able to put themselves forward to develop the studies.

The SC will be responsible for analyzing the requests from the researchers who are interested in investigating these topics and will recommend to the Board of Directors which study groups should be funded.

The Buzzi Unicem Foundation will therefore be responsible for supporting a limited number of centers to determine which studies identified by the SC to fund.

As such, the Buzzi Unicem Foundation proposes to redefine its mission in supporting MPM research so that it can have a significant impact on the quality of patient treatment.

The four members are:

- Marco E. Bianchi - Istituto Scientifico Universitario San Raffaele, Milano
- Giovanni Luca Ceresoli - Cliniche Humanitas Gavazzeni, Milano
- Maurizio D'Incalci - IRCCS Istituto Mario Negri, Milano
- Pier Luigi Filosso - Divisione di Chirurgia Toracica Università di Torino

Elisa Roca serves as the scientific secretary.

The Foundation has funded projects totaling over € 3 million during **its over ten years of activity (2004-2017)**. The results of these projects in the research and development of new strategies in the diagnosis and treatment of malignant mesothelioma have been published in prestigious international scientific journals.

With the continuous support of the Buzzi Unicem Foundation, these results are bringing therapeutic interventions to patients who have not responded to conventional treatment.

The non-profit Buzzi Unicem Foundation for Mesothelioma Research is listed in the directory of organizations that can receive funds through the “cinque per mille” (five per thousand) tax contribution scheme (tax ID number 02007580067). As of today, there are over 1,000 contributors.

## PROJECTS FUNDED between 2004-2016

### RESEARCH, DIAGNOSIS AND TREATMENT

- **RON receptor tyrosine kinase as a potential translational therapeutic target in malignant pleural mesothelioma**  
Dr. Steven Gray, Trinity College, Dublin
- **Preclinical evaluation of the antiproliferative effect of new kinase inhibitors in the treatment of malignant mesothelioma**
- **Post-genomics and chemoresistance in pleural mesothelioma**
- **Nanomedicine and RNA interference as innovative therapy for malignant mesothelioma**  
Prof. Giovanni Gaudino, DISCAFF, Università Piemonte Orientale Novara (*University of Eastern Piedmont*)
- **Clinical implications of estrogen receptor expression in mesothelioma**  
Prof.ssa Laura Moro, DISCAFF, Università Piemonte Orientale Novara (*University of Eastern Piedmont*)
- **Genomic analysis of malignant pleural mesothelioma by DNA-microarray: evaluation of individual susceptibility**  
Prof. Riccardo Puntoni, Istituto Scientifico Tumori Genova e Università Pisa (*Tumor Scientific Institute, Genoa and University of Pisa*)
- **Recombinant viruses expressing mesothelioma-specific antigens**  
Prof. Antonio G. Siccardi, Istituto Scientifico S. Raffaele Università di Milano (*San Raffaele Scientific Institute, University of Milan*)
- **Epidemiological analysis of the role of genes in the Casale Monferrato population**  
Prof.ssa Irma Dianzani, Scienze Mediche - Università Piemonte Orientale Novara (*Medical Sciences, University of Eastern Piedmont*)
- **Search for specific anti-SV40 antibodies and SV40 DNA sequences in mesothelioma patients exposed to asbestos**  
Prof. Mauro Tognon, Morfologia ed Embriologia - Università Ferrara (*Morphology and Embriology, University of Ferrara*)
- **Analysis of the response of mesothelioma stem cells to drugs**  
Prof. Giorgio Corte, Istituto Ricerca sul Cancro – Genova (*Cancer Research Institute, Genoa*)
- **Malignant mesothelioma biological bank**  
Dott. Pier Giacomo Beta, Anatomia patologia ASO Alessandria (*Anatomy Pathology, Alessandria Hospital*)
- **Development of bioimmunotherapy strategies in pleural mesothelioma**  
Prof. Michele Maio, Immunoterapia Oncologica - Università Siena (*Oncology Immunotherapy, University of Siena*)
- **Chemoprevention for subjects predisposed to mesothelioma**  
Dott. Stefano Bonassi, Istituto Nazionale per la ricerca sul cancro - Genova (*National Institute for Cancer Research, Genoa*)
- **Dose-intensive postoperative radiotherapy in pleural mesothelioma**  
Prof. Stefano Magrini, Radioterapia Spedali Civili di Brescia - Istituto del Radio O.Alberti, Brescia (*Radiotherapy, Brescia Civil Hospital, O. Alberti Radiotherapy Institute*)
- **Mesothelin and serum osteopontin dosages**  
Dr. Alfonso Cristaudo, Medicina Preventiva del Lavoro - Azienda Ospedaliera Universitaria Pisana (*Workplace Preventive Medicine – University Hospital of Pisa*)
- **Evaluation of the role of Perifosine as an inhibitor of mesothelioma**  
Dr. Camillo Porta, Oncologia Medica - Policlinico San Matteo Università di Pavia (*Medical Oncology, San Matteo Polyclinic, University of Pavia*)
- **Plasma concentration measurement of SMR – serum mesothelin diagnostic kits**  
Dott. Mario Botta, Oncologia ASO Casale (*Oncology, Casale Hospital*)

- **Diagnosis and treatment of molecular targets in pulmonary oncology**  
Dott. Gian Franco Tassi, Pneumologia ASO Brescia (*Pneumology, Brescia Hospital*)
- **Evaluation of PDGF receptor mutations in the tissues of malignant mesothelioma patients**  
Dott. Stefano Landi, Università di Pisa
- **Evaluation of GRP78 and the eIF6 transcription factor in malignant mesothelioma**  
Dott. Stefano Biffo, Istituto Scientifico San Raffaele Università di Milano (*San Raffaele Scientific Institute, University of Milan*)
- **On-call home nursing assistance for terminally ill patients**  
Dott.ssa Daniela Degiovanni – SOS Cure Palliative, ASL 21 Casale Monferrato (*SOS Palliative Care, Casale Monferrato Hospital 21*)
- **Donation of a 3CCD diagnostic camera**  
Dott. Ezio Piccolini, Struttura Complessa di Pneumologia dell'ASL 21 di Casale Monferrato (*Pneumology Department, Casale Monferrato Hospital 21*)
- **Donation of two monitored Recovery Units**  
Dott. Gianfranco Tassi, Spedali Civili di Brescia (*Brescia Civil Hospital*)
- **Donation of an individual patient television system**  
Reparto Pneumologia, Spedali Civili Brescia (*Pneumology Department, Brescia Civil Hospital*)
- **Mai Da Soli (*Never Alone*) project: a dedicated service for mesothelioma patients**  
ASL e ASO Alessandria (*Alessandria Hospitals*)
- **Tamoxifen as a Potential Therapeutic in Malignant Pleural Mesothelioma**  
Warren Thomas (PhD), Royal College of Surgeons in Ireland, Education and Research Centre, Dublin (Ireland)
- **Preclinical evaluation of new treatments for malignant pleural mesothelioma (MPM)**  
Laura Moro (PhD), University of Eastern Piedmont "A. Avogadro"
- **Identification of the mechanisms of resistance and new molecular targets in stem cells derived from human malignant pleural mesothelioma**  
Tullio Florio (PhD), University of Genoa
- **Active nutrients: a synergistic attack to malignant mesothelioma**  
Bruno Burlando (PhD), University of Eastern Piedmont "Amedeo Avogadro"
- **Anti-survivin vaccine for human use**  
Pietro Bertino (PhD), University of Hawaii, Honolulu
- **Phase II study on the activity of trabectedin in pretreated epithelioid or biphasic/sarcomatoid malignant pleural mesothelioma (MPM)**  
ATREUS Study
- **A phase II study of the combination of gemcitabine and imatinib mesylate in pemetrexed-pretreated patients with malignant pleural mesothelioma**  
Dr. Paolo Zucali, Istituto Clinico Humanitas, Rozzano (MI)
- **Immunotherapy treatments for mesothelioma**  
Marco Bianchi (PhD), Vita-Salute San Raffaele University, Milan
- **Identification of a new drug (and its mechanism of action) being active in mesothelioma models obtained from some cell lines**  
Maurizio d'Incalci (PhD), Mario Negri Institute for Pharmacological Research, Milan

- **UFIM (Intercompany Functional Unit for Mesothelioma) project on radiological analysis of malignant pleural mesothelioma, diagnosis, assessment of treatment response, monitoring of the disease and scientific research**

Alessandria Hospital

## BIBLIOGRAPHIC REVIEW AS OF DECEMBER 2015

This scientific literature review is a quick, easy way of staying up-to-date that is readily available to researchers and clinicians.

The main **objectives** of this scientific literature review are as follows:

- 1) **Provide accurate, scientifically proven information.**
- 2) **Update** the experts in the field (among others) on new diagnostic methods and techniques, preclinical and clinical studies, and research currently underway.
- 3) **Provide a complete list of analyzed bibliographic references**, so that interested parties can find further information on the topic.
- 4) **Address a varied audience** consisting of specialists and non-specialists alike.
- 5) **Provide research results mainly to patients and their families**, as well as general practitioners and lastly specialists. This is why the review has been written in a methodical, informative but non-scientific style. Patients and their families can access current, easily comprehensible information supported by scientific studies.
- 6) **Provide more information to general practitioners** about a rare disease with a growing rate of incidence to increase the prospects of treatment and care of MPM patients.
- 7) **Help update Specialists and Researchers in the field**, specifically by providing the list of analyzed publications so that they can consult the latest, select and appropriately filtered innovations.

This section consists of a six-monthly literature review which does not presume to be completely exhaustive (please refer to the scientific articles for further information), but provides the latest MPM research news translated into a non-scientific language.

- Malignant Pleural Mesothelioma: from the bench to the bedside
- Mesothelioma: What's New?
- Treating Malignant Pleural Mesothelioma: an update on the situation at the dawn of 2014
- Micro-RNAs and malignant pleural mesothelioma
- Malignant pleural mesothelioma and inflammation
- Immunotherapy and Malignant Pleural Mesothelioma