

Editorial

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Pleura and Peritoneum: the forgotten organs

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The pleura is the serous membrane which forms the lining of the pleural cavity and the peritoneum is the serous membrane covering the abdominal cavity. The abdominal cavity is the largest serous cavity of the human body, followed by both pleural cavities. The surface of the peritoneum is equivalent to the surface of the skin. Peritoneal and pleural diseases (such as peritonitis or peritoneal metastasis) are common and often result in life-threatening conditions.

However, pleura and peritoneum have been relatively poorly studied, as compared to other organs. In fact, it seems that pleura and peritoneum have been largely forgotten by physicians and scientists during the last 50 years. A close look at ancient literature shows that this was not the case before. The peritoneum was a feared organ until the end of the 1920s and was the object of numerous scientific communications in anatomical and surgical societies.

Why did the scientific interest for pleura and peritoneum vanish after World War II? A hypothesis might be that these organs cannot be seen directly during clinical examination and that, in spite of technical progress, visualisation of pleura and peritoneum with imaging techniques remains challenging. Today, pleura and peritoneum are only considered as membranes, in contrast to the skin, which is recognized as an organ and object of a medical specialization.

Our recent search on Elsevier's Scopus® has shown that published research articles on pleura and peritoneum are one order of magnitude less than publications on other digestive organs such as stomach, colon or liver. For scientists and physicians, it is extraordinarily difficult to get access to reliable and recent information – with the exception of articles on peritoneal dialysis and Hyperthermic IntraPeritoneal Chemotherapy, which form the large majority of the research publications related to pleura and peritoneum. Most references are older, and only very few general textbooks focusing on these organs have been published in the last 30 years [1–4].

This new journal, *Pleura and Peritoneum* wants to change this by creating a high-level platform for basic scientists, clinical researchers and physicians allowing interdisciplinary

information exchange on pleura and peritoneum – an unmet need so far. *Pleura and Peritoneum* focuses on the clinical aspects for the diagnosis and treatment of diseases of the human organs peritoneum and pleura, and publishes reviews, mini reviews, recommendations, educational and opinion papers in this field. It will devote a large place to images and videos obtained during laparoscopy and video-assisted thoracic surgery (VATS). The *Journal* also covers research articles of experimental and clinical results, and biochemical and anatomical findings. The list of topics is published in the first issue of the *Journal*.

However, *Pleura and Peritoneum* is not only a journal, it is a project. One we hope will increase the awareness and the interest of the scientific and medical communities for pleura and peritoneum. It is perfectly clear to us that we are now at the starting point of a long pilgrimage and that this way might be difficult and perhaps even painful. However, we are hopefully the project will be successful. Two dozen of the leading scientists in the field have already joined this project. It is most likely that we will meet many other scientific pilgrims on the way. We will grow, together and step-by-step, a high-quality and interdisciplinary knowledge base on pleura and peritoneum. We hope that talking together, exchanging results and criticism, standardizing measures and outcomes and coordinating research efforts will lead to better therapies of the life threatening diseases of pleura and peritoneum. Finally, it is allowed to dream that, in the long term, this new community of interest might obtain full recognition of pleura and peritoneum as organs of the human body.

In the name of the Editorial Board of *Pleura and Peritoneum*, I invite you to submit your basic and clinical research in the field to the *Journal*. We will take care of it.

References

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Pleura and Peritoneum: Topics

Macroscopic, microscopic and electromicroscopic anatomy

- Peritoneum: anatomy
- Pleura: anatomy
- Peritoneum: physiology
- Pleura: physiology
- Peritoneum: immunology
- Pleura: immunology

Ontology and development

- Peritoneum: ontology
- Pleura: ontology

Immunology, lymphatic drainage, stomata, milky spots, omentum

- Immunology of normal pleura and peritoneum
- Peritoneum and pleura: lymphatic drainage
- Stomata and milky spots
- Omentum

Vascularisation and Innervation

- Pleura and peritoneum as a physiological membrane, pharmacology
- Peritoneum-Blood Barrier: Physiology
- Pleura-Blood Barrier: Physiology
- Pharmacological aspects of pleural and peritoneal transport

Primary benign and malignant diseases of the pleura and peritoneum, incl. mesothelioma

- Pleural carcinomatosis
- Peritoneal carcinomatosis

Intraperitoneal and intrapleural chemotherapy modalities: EPIC, HIPEC, HITOC, PIPAC, PITAC, others

- EPIC
- HIPEC
- HITOC
- PIPAC
- PITAC

Peritoneal fibrosis and sclerosis: mechanisms, prevention and therapy

- Etiology, pathogenesis, classification
- Incidence and prevention
- Therapy: conservative, surgical

Cytoreductive surgery, peritonectomy, pleurectomy, pleurodesis: indications, technique and results

- CRS and HIPEC in colorectal cancer
- CRS and HIPEC in ovarian cancer
- CRS and HIPEC in gastric cancer
- CRS and HIPEC in appendiceal cancer
- CRS and HIPEC in mesothelioma

Cytology: diagnosis and prognosis

Therapy response assessment: imaging, laparoscopy, histology

RECIST criteria and small volumetric disease

Radiology: CT-scan and PET-CT

Radiology: MRT and PET-MRT

Laparoscopy

Peritoneal staging systems: PCI, PSDSS, Fagotti, ...

Molecular pathology of pleural and peritoneal diseases.

Adhesions: pathogenesis, prevention and therapy

Pleuritis, Peritonitis: benign

Ascitis (benign and malignant): pathogenesis, diagnosis, therapy

Pleural effusion: differential diagnosis, pathogenesis, therapy

Intraperitoneal lavage: indication and results

Rare diseases of peritoneum and pleura.

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