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(p: 0,016 for STAI-Y1, p<0,001 for SDT, p:0,013 for BDI-2), week of treatment (p: 0,012 for STAI-Y1 and p: 0,031 for SDT) and disease (p:0,015 for STAI-Y1, p<0,001 for SDT and p:0,020 for BDI-2).

#### Conclusion

The prevalence of mood disorders in patients undergoing radiation therapy is higher than expected and even higher during the COVID-19 outbreak. These measurements could be useful as a baseline to start medical humanities programs to decrease these scores.

PO-1529 HITRIplus project: building a pan-European heavy ion therapy research community

S. Rossi<sup>1</sup>, M. Cirilli<sup>2</sup>, M. Dosanjh<sup>3</sup>, M. Durante<sup>4</sup>, A. Facoetti<sup>5</sup>, P. Fossati<sup>6</sup>, C. Graeff<sup>4</sup>, T. Haberer<sup>7</sup>, M.V. Livraga<sup>5</sup>, M. Necchi<sup>5</sup>, M. Plesko<sup>8</sup>, L. Rossi<sup>9</sup>, N. Sammut<sup>10</sup>, U. Schoetz<sup>11</sup>, M. Vretenar<sup>12</sup>

¹National Center of Oncological Hadrontherapy Fondazione CNAO, -, Pavia, Italy; ²CERN, Knowledge Transfer Department, Geneva, Switzerland; ³SEEIIST - South East European International Institute for Sustainable Technologies , -, Geneva, Switzerland; ⁴GSI Helmholtz Centre for Heavy Ion Research, Biophysics department, Darmstadt, Germany; ⁵National Center of Oncological Hadrontherapy CNAO Foundation, -, Pavia, Italy; ⁵MedAustron Ion Therapy Center, Medical department, Wiener Neustadt, Austria; ¬HIT Heidelberg Ion-Beam Therapy Center, Heidelberg University Hospital, Department of Radiation Oncology, Heidelberg, Germany; ³COSYLAB, -, Ljubljana, Slovakia; ³INFN National Institute for Nuclear Physics, Milan Unit, Milano, Italy; ¹University of Malta, Faculty of Information and Communications Technology, Msida, Malta; ¹¹Philipps-University, University Hospital Giessen and Marburg, Department of Radiotherapy and Radiooncology, Marburg, Germany; ¹²CERN, ATS/DO Department, Geneva, Switzerland

## Purpose or Objective

HITRIplus (Heavy Ion Therapy Research Integration plus) is an EU-funded project aiming to integrate and propel biophysics and medical research on cancer treatment with heavy ions beams while jointly developing the next generation of its instruments.

### Materials and Methods

It is a consortium made by 22 Institutes from 14 European countries engaging all relevant stakeholders and for the first time bringing together the four European ion therapy centres with leading EU industries, academia and research laboratories.

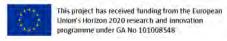
#### Results

The HITRIplus project is structured in 3 pillars. The Transnational Access (TA) will integrate and open to external clinicians and researchers the European facilities providing therapeutic ion beams. Networking Activities (NA) will create networks among the institutions and will open the heavy ion facilities to the EU clinical and research community. Joint Research Activities (JRA) will develop new technologies to extend the reach of the present generation centres and to define a new European reference design to make ion therapy more accessible. The TA Clinical access will offer the opportunity to European hospitals and cancer institutes to refer their patients to the heavy ion facilities and to share prospective clinical studies and patient follow-up. The Clinical Networking activities will promote the heavy ion therapy facilities to medical researchers all over Europe by raising awareness about the tumour types that could be treated. Collaborative platforms and databases will be set up to share data and experience and to spread a common language among the clinical users of the ion facilities. TA Research accesses will allow to carry out research activities with the heavy ion beams available among the partners.

### Conclusion

The HITRI*plus* will give the unique opportunity to European hospitals and oncological institutes to access and share the clinical expertise on heavy ion therapy by creating links among clinicians referring patients to the existing hadrontherapy facilities. It will also allow the radiation oncologists to work together with their colleagues in multicentre prospective comparative studies to improve the knowledge both in heavy ion therapy and in classical radiation oncology through clinical research practice and combining treatment modalities. The Research accesses will attract universities, research centres, and hospitals by using the beam time and research facilities of the existing heavy ion centres. Performing research at a clinical facility will allow researchers to meet different professionals and to have a clear perception of the possibility to translate the research from bench to bedside.





## PO-1530 Interobservator variability in GTV contouring in non-spine bone metastases

<u>C. De La Pinta¹</u>, R. García -LaTorre¹, A. Martínez-Lorca¹, M. Martín², J.A. Domínguez-Rullán¹, R. Hernanz ¹, T. Muñóz³, E. Fernández-Lizarbe¹, M. Garví¹, V. Pino¹, C. Vallejo¹, M. Alarza¹, A. Hervás Morón¹, S. Sancho García¹¹Ramón y Cajal Hospital, Radiation Oncology, Madrid, Spain; ²Ramón y Cajal Hospital, Radiation Oncology, Ramón y Cajal Hospital, Spain; ³Ramón y Cajal Hospital, Spain; ¬Ramón y Cajal Hospital, Spain; ¬Ramón y Cajal Hospital, Spain

# **Purpose or Objective**

The optimal imaging test for GTV delineation in non-spine bone metastases has not been defined. Adequate delimitation is critical in SBRT. The hypothesis is that MRI allows for better visualization of the extend of bone metastases in non-spine bone metastases and will optimize the accuracy of tumor delineation for stereotactic radiotherapy purposes, compared with CT only. We evaluate the interobserver agreement in GTV of non-spine