

weeks of treatment, and MRI guided re-planning should be considered mainly in the initial part of the RT course.

**PH-0368 Alexithymia, empathy and burn-out amongst medical physicists: the PRO BONO survey**

P. Franco<sup>1</sup>, V. Tesio<sup>2</sup>, J. Bertholet<sup>3</sup>, A. Gasnier<sup>4</sup>, E. Gonzalez del Portillo<sup>5</sup>, M. Spalek<sup>6</sup>, J. Bibault<sup>7</sup>, G. Borst<sup>8</sup>, W. Van Elmpt<sup>9</sup>, D. Thorwarth<sup>10</sup>, L. Mullaney<sup>11</sup>, K. Roe Redalen<sup>12</sup>, L. Dubois<sup>13</sup>, M. Bittner<sup>14</sup>, C. Chargary<sup>15</sup>, S. Perryck<sup>16</sup>, J. Heukelom<sup>17</sup>, S. Petit<sup>18</sup>, M. Lybeer<sup>19</sup>, L. Castelli<sup>2</sup>

<sup>1</sup>University of Turin, Department of Oncology- Radiation Oncology, Turin, Italy ; <sup>2</sup>University of Turin, Department of Psychology, Turin, Italy ; <sup>3</sup>The Institute of Cancer Research and the Royal Marsden NHS Foundation Trust, Joint Department of Physics, London, United Kingdom ; <sup>4</sup>Gustave Roussy Cancer Campus, Medical Physics Department, Villejuif, France ; <sup>5</sup>University Hospital of Salamanca, Department of Radiation Oncology, Salamanca, Spain ; <sup>6</sup>Maria Skłodowska-Curie Institute - Oncology Center, Department of Soft Tissue/Bone Sarcoma and Melanoma, Warsaw, Poland ; <sup>7</sup>Hopital Europeen Georges Pompidou- Universite Paris Descartes, Medical Physics Department, Paris, France ; <sup>8</sup>The Netherlands Cancer Institute- Antoni van Leeuwenhoek Hospital, Department of Radiation Oncology, Amsterdam, The Netherlands ; <sup>9</sup>GROW - School for Oncology and Developmental Biology- Maastricht University Medical Center, Department of Radiation Oncology, Maastricht, The Netherlands ; <sup>10</sup>University Hospital for Radiation Oncology Tübingen, Section for Biomedical Physics, Tübingen, Germany ; <sup>11</sup>Trinity College Dublin, Applied Radiation Therapy Trinity Research Group- Discipline of Radiation Therapy- School of Medicine, Dublin, Ireland ; <sup>12</sup>Norwegian University of Science and Technology, Department of Physics, Trondheim, Norway ; <sup>13</sup>GROW - School for Oncology and Developmental Biology- Maastricht University Medical Center, Department of Precision Medicine, Maastricht, The Netherlands ; <sup>14</sup>Arctoris, Arctoris, Oxford, United Kingdom ; <sup>15</sup>Gustave Roussy Cancer Campus, Department of Radiation Oncology, Villejuif, France ; <sup>16</sup>University Hospital Zurich and University of Zurich, Department of Radiation Oncology, Zurich, Switzerland ; <sup>17</sup>The Netherlands Cancer Institute- Antoni van Leeuwenhoek Hospital- Amsterdam, Department of Radiation Oncology, Amsterdam, The Netherlands ; <sup>18</sup>Erasmus Medical Center, Department of Medical Physics, Rotterdam, The Netherlands ; <sup>19</sup>ESTRO, ESTRO Office, Brussels, Belgium

**Purpose or Objective**

Burn-out syndrome (BOS) is frequently observed amongst oncology professional staff. It may impact work performance as well as physical and mental well-being. Personality influences the likelihood to experience BOS. Alexithymia is a psychological construct involving dysfunctional emotion processing and awareness. Empathy is the capacity to intercept and understand another's 'state of mind' or emotion. The PROject on Burn-Out in Radiation Oncology (PRO BONO study) was developed to explore BOS amongst oncology professionals and to investigate the correlation between alexithymia and empathy, and the probability to develop BOS.

**Material and Methods**

An anonymous online survey was distributed to European Society for Radiotherapy and Oncology (ESTRO) members. Each participant was requested to complete 3 validated questionnaires to evaluate alexithymia, empathy and BOS:

the Toronto Alexithymia Scale (TAS-20), the Interpersonal Reactivity Index (IRI) and the Professional Quality of Life Scale (ProQoL), respectively. The present analysis focuses on the population of medical physicists (MPs). Compassion satisfaction (CS), a measure of satisfaction at work, secondary traumatic stress (STS) and BOS (the 3 ProQoL subscales) were evaluated and correlation with alexithymia and empathy (empathic concern, perspective taking and personal distress) was investigated with generalized linear modelling. Covariates found to be significant on univariate linear regression analysis were included in the multivariate linear regression model. R<sup>2</sup> and adjusted R<sup>2</sup> were used to assess model fit.

**Results**

A total of 308 MPs, 49.7% female and 50.3% male, completed all requested questionnaires. Mean age was 39.9 years (SD:9.6). Point prevalence of alexithymic trait in this cohort was 13.6%, while borderline alexithymia was observed in 20.8%. With respect to professional quality of life, high levels of STS and BOS were observed with 23.1% and 30.2% of respondents, respectively. Interestingly, only 13.6% of MPs scored high in the CS domain of ProQoL. A higher level of alexithymia (B:0.255;SE:0.025;p<0.001), a lower score in the domain 'perspective taking' within IRI (B:-0.901;SE:0.370;p=0.015) and not 'feeling valued by supervisors' (B:-3.724;SE:0.582; p<0.001) were found to correlate with higher scores in BOS. A lower level of alexithymia (B:-0.127;SE:0.028;p<0.001), higher scores in the domains 'empathic concern' (B:1.414;SE:0.470;p=0.003) and 'perspective taking' (B:1.414;SE:0.470;p=0.003) within IRI (B:1.025;SE:0.459;p=0.026) and 'feeling valued by supervisors' (B:2.844;SE:0.656; p<0.001) were found to be correlated to higher levels in CS.

**Conclusion**

The PRO BONO study provided an overview of BOS, alexithymia and empathy among MPs involved in the field of radiation oncology. Alexithymic personality trait increased the likelihood to develop BOS, with less professional satisfaction. This finding can be potentially used to implement screening programs to address this issue with preventive measures.

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**Plenary Session: Clinical trials**

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**OC-0369 Long-Term Quality of Life after (chemo)radiotherapy for high-risk Endometrial Cancer in PORTEC-3**

C. Post<sup>1</sup>, S.M. De Boer<sup>1</sup>, M.E. Powell<sup>2</sup>, L. Mileschkin<sup>3</sup>, D. Katsaros<sup>4</sup>, P. Bessette<sup>5</sup>, C. Haie-Meder<sup>6</sup>, P.B. Ottevanger<sup>7</sup>, J.A. Ledermann<sup>8</sup>, P. Khaw<sup>9</sup>, R. D'Amico<sup>10</sup>, A. Fyles<sup>11</sup>, M. Baron<sup>12</sup>, H.C. Kitchener<sup>13</sup>, H.W. Nijman<sup>14</sup>, L.C. Lutgens<sup>15</sup>, S. Brooks<sup>16</sup>, I.M. Jürgenliemk-Schulz<sup>17</sup>, A. Feeney<sup>8</sup>, R.A. Nout<sup>1</sup>, K.W. Verhoeven-Adema<sup>18</sup>, V.T. Smit<sup>19</sup>, H. Putter<sup>20</sup>, C.L. Creutzberg<sup>1</sup>

<sup>1</sup>Leiden University Medical Center, Radiation Oncology, Leiden, The Netherlands ; <sup>2</sup>Barts Health NHS Trust, Clinical Oncology, London, United Kingdom ; <sup>3</sup>Peter MacCallum Cancer Centre, Cancer Medicine, Melbourne, Australia ; <sup>4</sup>Città della Salute and S Anna Hospital, Surgical Sciences, Torino, Italy ; <sup>5</sup>University of Sherbrooke, Obstetrics and Gynaecology, Sherbrooke, Canada ; <sup>6</sup>Institut Gustave Roussy, Radiotherapy, Villejuif, France ; <sup>7</sup>Radboudumc, Medical Oncology, Nijmegen, The Netherlands ; <sup>8</sup>UCL Cancer Institute, Cancer Research UK and UCL Cancer Trials Centre, London, United Kingdom ; <sup>9</sup>Peter MacCallum Cancer Center, Radiation Oncology, Melbourne, Australia ;