

## C30

### Initial Impact of a Systematic Multidisciplinary Approach on the Management of Patients with Gastroenteropancreatic Neuroendocrine Tumor

Gianluca Tamagno<sup>1</sup>, Lisa McGowan<sup>1</sup>, Romaine King<sup>1</sup>, Lisa Lavelle<sup>1</sup>, Rebecca Somerville<sup>1</sup>, Sine Phelan<sup>2</sup>, Stephen John Skehan<sup>3</sup>, Justin Gerald Geoghegan<sup>4</sup>, Donal Maguire<sup>4</sup>, David Fennelly<sup>5</sup>, Dermot O'Toole<sup>6</sup>, Oscar Traynor<sup>4</sup>, Kieran Sheahan<sup>2</sup>, and Donal O'Shea<sup>1</sup>

<sup>1</sup> Department of Endocrinology & Diabetes Mellitus, St Vincent's University Hospital, Dublin 4, Ireland

<sup>2</sup> Department of Pathology & Laboratory Medicine, St Vincent's University Hospital, Dublin 4, Ireland

<sup>3</sup> Department of Radiology, St Vincent's University Hospital, Dublin 4, Ireland

<sup>4</sup> Liver Transplant Unit, St Vincent's University Hospital, Dublin 4, Ireland

<sup>5</sup> Department of Medical Oncology, St Vincent's University Hospital, Dublin 4, Ireland

<sup>6</sup> Department of Gastroenterology, St James's Hospital, Dublin 8, Ireland

**Background:** A multidisciplinary approach to gastroenteropancreatic (GEP) neuroendocrine tumors (NETs) is advised for the optimal care of GEP NET patients. A systematic multidisciplinary approach to GEP NETs, including regular bimonthly multidisciplinary team meetings, has been established at our Institution from May 2007 and we have analyzed the initial impact of a systematic multidisciplinary approach on the management of GEP NET patients.

**Methods:** We have collected and compared the biochemistry, radiology (including endoscopy), and pathology data as well as the therapeutic strategies in the patients with GEP NET diagnosed, treated, or followed-up in our Institution since January 1993 to April 2007 (91 patients in 172 months) with those from patients that came to us after the multidisciplinary approach starting (42 patients from May 2007 to October 2008, 18 months).

**Results:** Before the establishment of the multidisciplinary approach, a lack of consistency in the laboratory (chromogranin A: 0%), imaging/endoscopy (54.9%), and pathology (Ki-67 and/or mitotic index: 23.1%) findings before the treatment (or the consideration for treatment) as well as in the follow-up (chromogranin A: 0%; imaging/endoscopy: 33.0%) of the patients was identified. These features have been at least partially reversed by the systematic multidisciplinary approach itself (chromogranin A: 16.7% pre-care -  $p = 0.00022$ , 52.4% post-care -  $p < 0.00001$ ; imaging/endoscopy: 83.3% pre-care -  $p = 0.00174$ , 73.8% post-care -  $p = 0.00001$ ; Ki-67 and/or mitotic index: 52.4% -  $p = 0.00128$ ). Also the therapeutic management of the pre-multidisciplinary approach patients was not consistent and has been altered by the multidisciplinary approach (use of somatostatin analogs before and after the establishment of the multidisciplinary approach: 11.0% and 47.4%, respectively -  $p = 0.00001$ ).

**Conclusion:** This study suggests that a systematic multidisciplinary approach can significantly impact on GEP NET patient care and should be established in all centers dealing with these tumors.