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## Between pathological prostate cancer lymph node and sentinel lymph node status: which one is the most informative?

A Morel, V Fleury, M Le Thiec, B. Maucherat, M Colombié, D Rusu, G Aillet, Françoise Kraeber-Bodéré, T Rousseau, Loïc Champion, et al.

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58.7% and TFS rate was 81.3%. Three Clavien-Dindo Grade III complication were observed (ureter injury, rectal injury, suprapubic catheterization). **Conclusion:** Salvage surgery of local recurrence within the seminal vesicle bed with PSMA-RGS is feasible and may present an opportunity in highly selected patients with local recurrence to prolong BCR-free survival and therefore possibly increase therapy-free survival. Further studies are needed to confirm our findings. **References:** None

#### OP-418

##### Between pathological prostate cancer lymph node and sentinel lymph node status : which one is the most informative ?

A. Morel<sup>1</sup>, V. Fleury<sup>1</sup>, M. Le Thiec<sup>1</sup>, B. Maucherat<sup>1</sup>, M. Colombié<sup>1</sup>, D. Rusu<sup>1</sup>, G. Aillet<sup>2</sup>, F. Kraeber-Bodéré<sup>1,3</sup>, T. Rousseau<sup>4</sup>, L. Campion<sup>1,3</sup>, C. Rousseau<sup>1,3</sup>;

<sup>1</sup>ICO René Gauducheau, Saint-Herblain, FRANCE,

<sup>2</sup>Histopathology Institute, Nantes, FRANCE, <sup>3</sup>Nantes

University, CNRS, Inserm, CRCINA, Nantes, FRANCE, <sup>4</sup>Urologic Clinic Nantes-Atlantis, Saint-Herblain, FRANCE.

**Aim/Introduction:** Due to the concept of sentinel lymph node (SLN) where the pathologic status of SLN reflects the other pathologic lymph nodes status, SLN should contain decisive information for clinical outcome. This study assessed the clinical outcome after laparoscopic prostatectomy associated with isotopic SLN detection and extensive pelvic resection (ePLND) in localized prostate cancer (PCa) patients. **Materials and Methods:** From February 2009 until October 2015, a total of 231 consecutive patients were analyzed. Biochemical Progression-Free Survival (PFS) was assessed with Kaplan-Meier curves. Various histopathological parameters were analyzed by univariate and multivariate analysis by Cox regression analysis. **Results:** The study median follow-up was 7.1 years (95% CI: [6.6-7.5]). Lymph node (LN) metastases occurred in 38 patients. We removed an average of 20.2±9.2 LNs via ePLND and 6.05±3.99 SLN. At the time of final follow-up, 36.4% (84/231) patients had recurrence and we noticed 11 specific mortalities. In univariate analysis, characteristics of primary tumour, as pT stage, ISUP Grade Group, percentage of positive biopsy cores, intersection margin, vesicles and prostate capsule involved, significantly affected the PFS from  $p < 10^{-4}$  to  $10^{-6}$ . Concerning LN metastases, the most relevant data were the number of metastases both in LN and in SLN and particularly the presence of SLN and LN macro-metastases ( $p < 10^{-12}$  to  $10^{-15}$ ). In the multivariate analysis evaluating PFS, the most significant prognostic factor was evidence of macro- or micro-metastases in SLN (adjusted hazard ratio of 3.88 [95%CI: 2.24-6.71],  $p < 2.10 \times 10^{-5}$ ) but very interestingly not in extra SLN (adjusted hazard ratio of 0.85 [95%CI: 0.37-1.97],  $p = 0.71$ ). **Conclusion:** SLN detection seems to contain decisive information for the

clinical outcome of patients with localized PCa because metastatic or non-metastatic status of SLN had a strong impact on the PFS. The question arises as to propose immediate postoperative additional treatment to patients with metastatic SLN as temporarily received adjuvant androgen deprivation therapy? **References:** Muck A et al. Urol Int. 2015;94(3):296-306

806

#### Cutting Edge Science Track - TROP Session: Radiation Protection of Staff, and Advances in Technology

Friday, October 23, 2020, 16:55 - 18:05

Channel 6

#### OP-419

##### Extremity dose in nuclear medicine: EURADOS initiative to update the ORAMED results

R. Kollaard<sup>1</sup>, A. Zorz<sup>2</sup>, N. Cherbuin<sup>3</sup>, J. Cooke<sup>4</sup>, P. Covens<sup>5</sup>, M. Crabbé<sup>6</sup>, L. Cunha<sup>7</sup>, J. Dabin<sup>8</sup>, A. Dowling<sup>9</sup>, M. Ginjaume<sup>9</sup>, S. Haruz-Waschitz<sup>10</sup>, A. Kyriakidou<sup>11</sup>, A. McCann<sup>8</sup>, L. McNamara<sup>12</sup>;

<sup>1</sup>Nuclear Research and Consultancy Group (NRG), Arnhem, NETHERLANDS, <sup>2</sup>Istituto Oncologico Veneto IOV - IRCCS, Padua, ITALY, <sup>3</sup>HUG-CHUV, Lausanne, SWITZERLAND, <sup>4</sup>St. James Hospital, Dublin, IRELAND, <sup>5</sup>VUB, Bruxelles, BELGIUM, <sup>6</sup>SCK.CEN, Mol, BELGIUM, <sup>7</sup>IsoPor-Azores, Angra do Heroísmo, PORTUGAL, <sup>8</sup>St. Vincent's University Hospital, Dublin, IRELAND, <sup>9</sup>UPC, Barcelona, SPAIN, <sup>10</sup>Shamir Medical Center, Shamir, ISRAEL, <sup>11</sup>EAEA, Athens, GREECE, <sup>12</sup>University Hospital Limerick, Limerick, IRELAND.

**Aim/Introduction:** Extremity dose is a radioprotection concern for Nuclear Medicine (NM) departments. According to the ORAMED study, nearly one of five workers could receive an equivalent skin dose over the annual limit. Since the publication of the ORAMED project results in 2011, NM departments have undergone several novelties. New isotopes have been introduced, like <sup>68</sup>Ga or <sup>177</sup>Lu, and radiation protection devices, such as (semi-)automatic dose dispensers, are now widely used. A subgroup of the EURADOS working group 12 has been established in order to update the results of ORAMED project according to the actual state of the NM departments in Europe. **Materials and Methods:** A detailed literature review regarding the extremity exposures of NM workers has been performed. A questionnaire has been distributed to the European regulators, to investigate the extremity doses collected in national dose registries as well as some issues related to the use of dosimeters for extremities. A second questionnaire is in preparation to be submitted to single European NM departments. **Results:** Regarding the literature review, more than 150 papers published between 1985 and 2019 have been analyzed. Articles were stratified according to the type of isotopes and procedures. 44% of the articles