Contribution ID: **363** Type: **Oral Presentation**

Nuclear Technologies in Medicine

Tuesday, 5 July 2022 16:00 (30 minutes)

The current focus of personalized medicine is towards the use of the theranostic approach- the development of an interdependent, collaborative targeted therapeutic and acompanion diagnostic test. Nuclear Medicine has provided non-invasive imaging fordecades and together with therapeutic radioisotopes it is ideally suited to contribute to this quest in medicine. Positron Emission Tomography - PET/CT imaging plays an important role in this and fortunately diversification of the use of the well-known but nonspecific 18 F-Flurodeoxyglucose-PET/CT to the use of radiometals such as 68 Ga, 64 Cu and 89 Zr has created many new opportunities in the Nuclear Medicine fraternity. The successful implementation of 68 Ga-DOTATATE and 68 Ga-PSMA in the clinic for neuroendocrine and prostate cancer imaging has opened the option for treatment of these diseases with the therapeutic pair selected from 177 Lu and 225 Ac / 213 Bi (beta and alpha emitter respectively). Not only is success achieved in oncology but also in imaging of infection (including Tuberculosis) with several new compounds under investigation; 68 Ga-UBI and 18 F-FDS. Illustrations of the processes followed in drug design, radiolabelling, radiopharmaceutical formulations and (pre)clinical outcome will be given in this presentation.

Apply to be considered for a student ; award (Yes / No)?

No

Level for award;(Hons, MSc, PhD, N/A)?

N/A

Consent on use of personal information: Abstract Submission

Yes, I ACCEPT

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