

Comparison with Previous Publications

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TG36 WORKSHOP | 29 JULY 2025 | 12:00 - 14:00 UTC

RADIATION DOSE TO PATIENTS IN DIAGNOSTIC NUCLEAR MEDICINE



Main Features that Contribute to the Differences

See Augusto's presentation!

Descriptive → Compartmental biokinetic models

Static → Dynamic bladder model

HATM (Publication 100) when appropriate

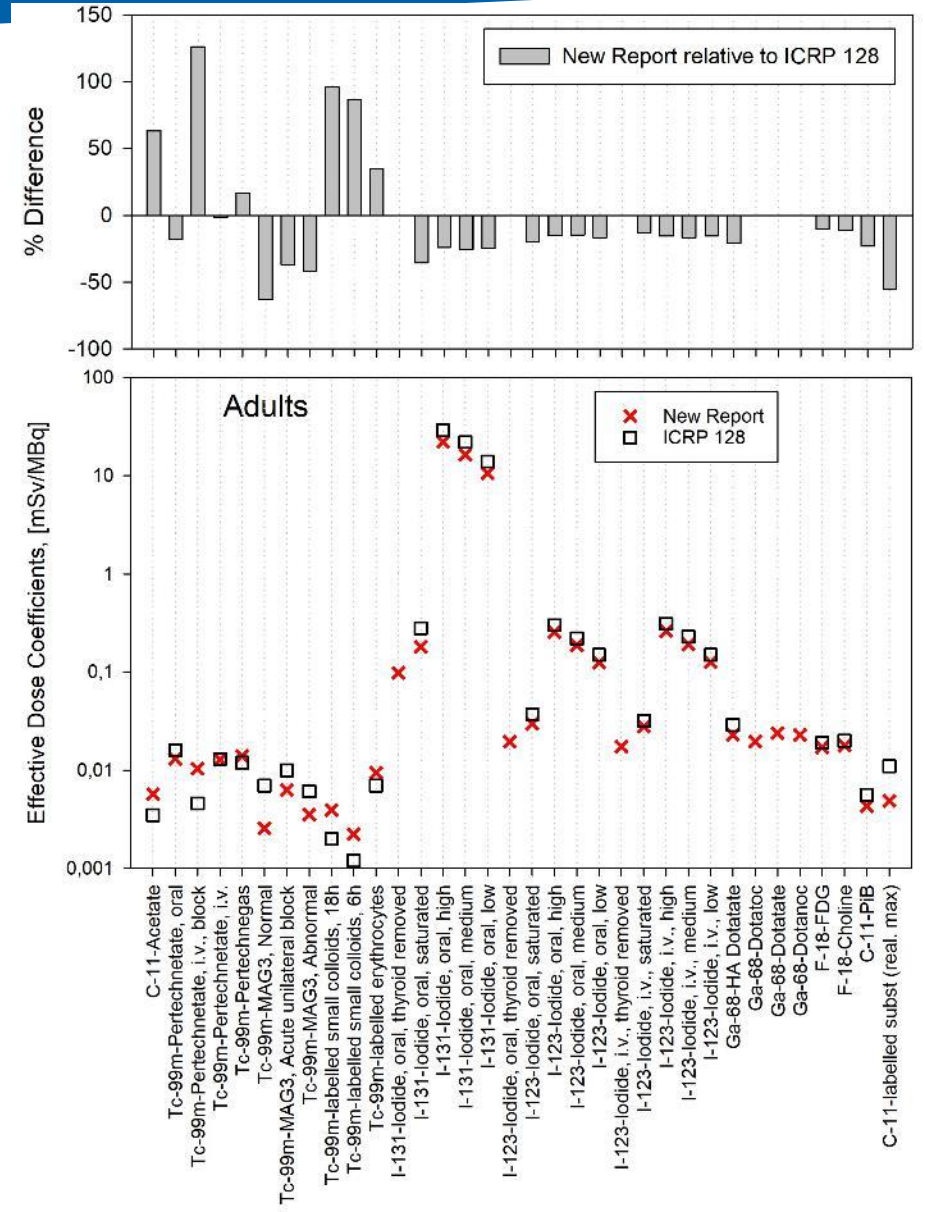
New computational phantoms and new SAFs (Publications 110, 133, 143, 155)

New weighting factors and definition of Effective Dose (Publication 103)

Some special cases, e.g. Iodide (saturated thyroid) and intratumoural injection of Tc-99m-labelled small colloids

→ Complex, a combination of several factors

Differences to Publication 128: Effective Dose



Differences to Publication 128:

Effective Dose

→ **Tc-99m-Pertechnetat, i.v., thyroid blocking agent given**

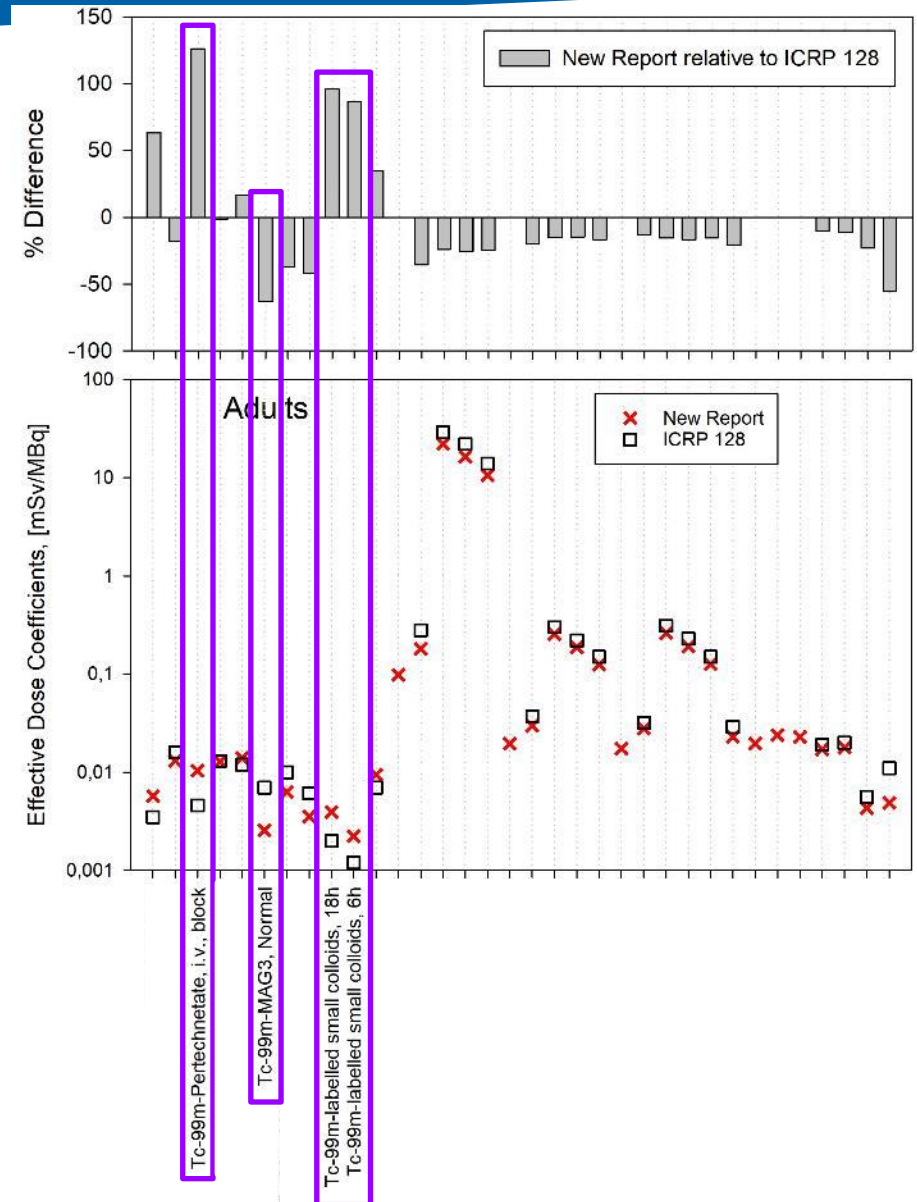
More realistic description of the distribution and excretion of RP

→ **Tc-99m-MAG3, normal renal function**

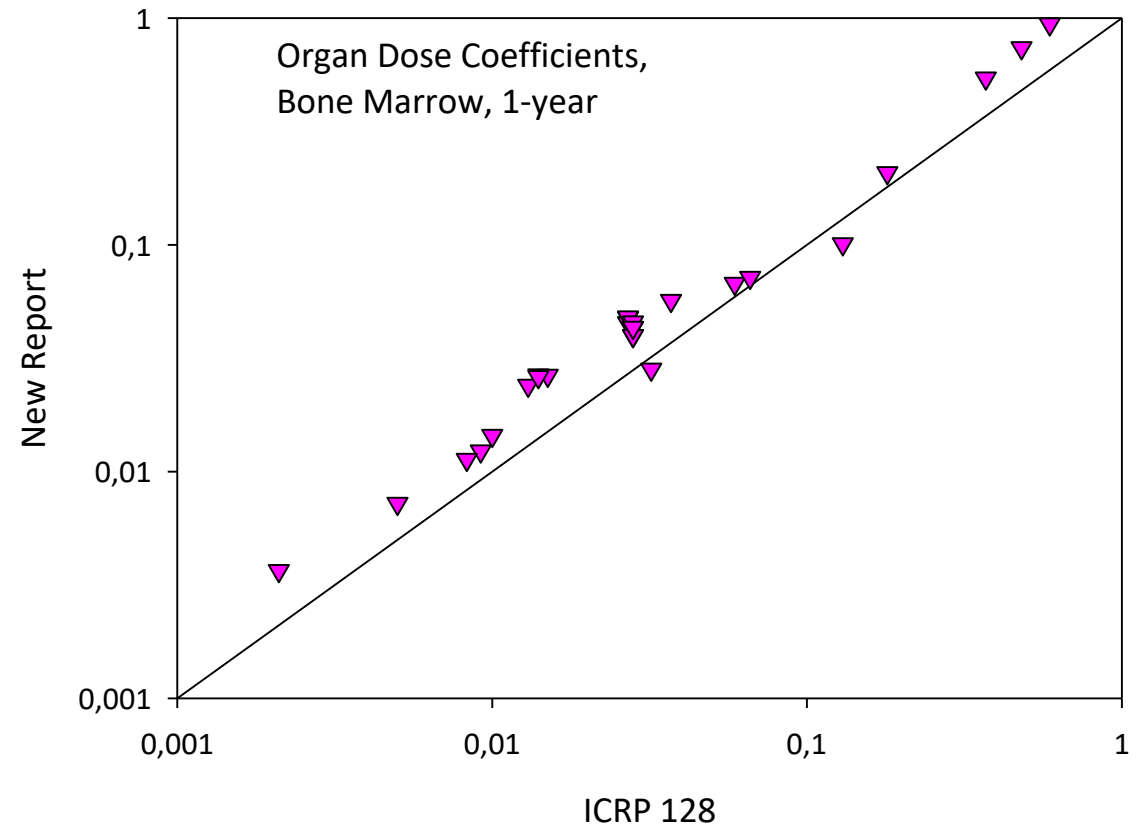
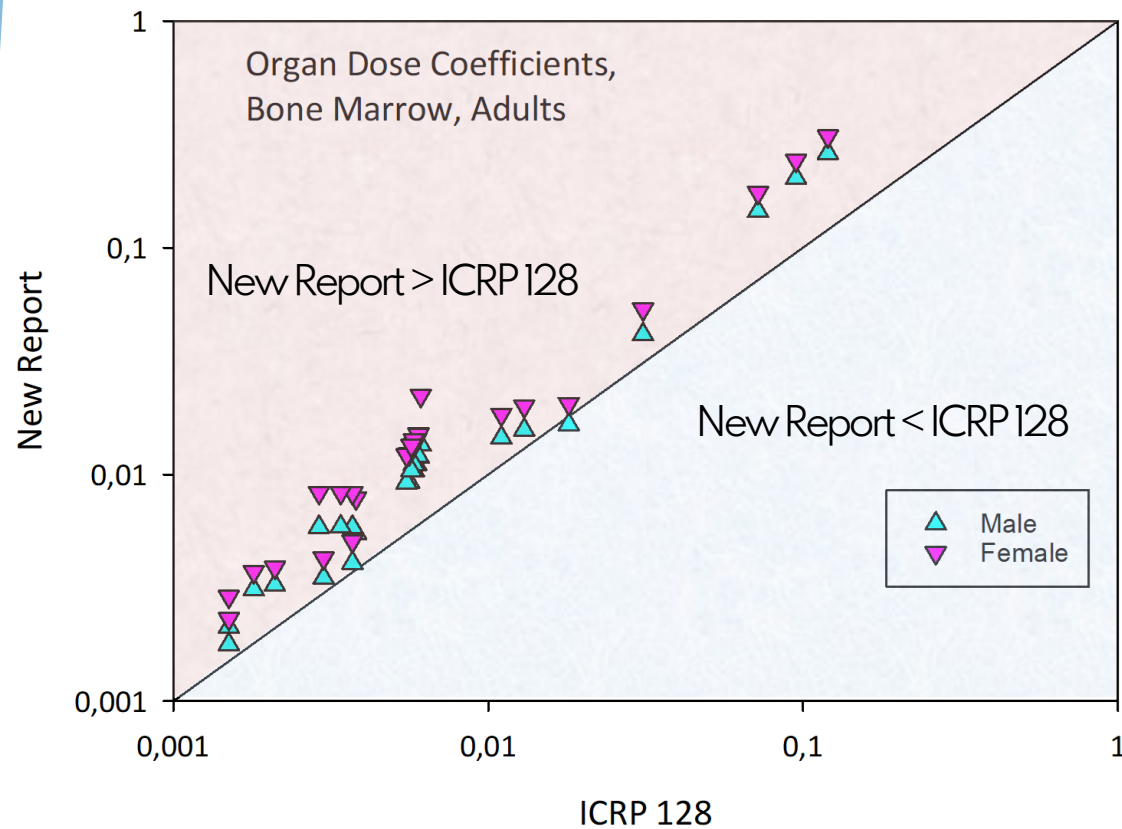
Use of dynamic bladder model in combination with a commonly used time of first voiding

→ **Tc-99m-labelled small colloids, intratumoural injection**

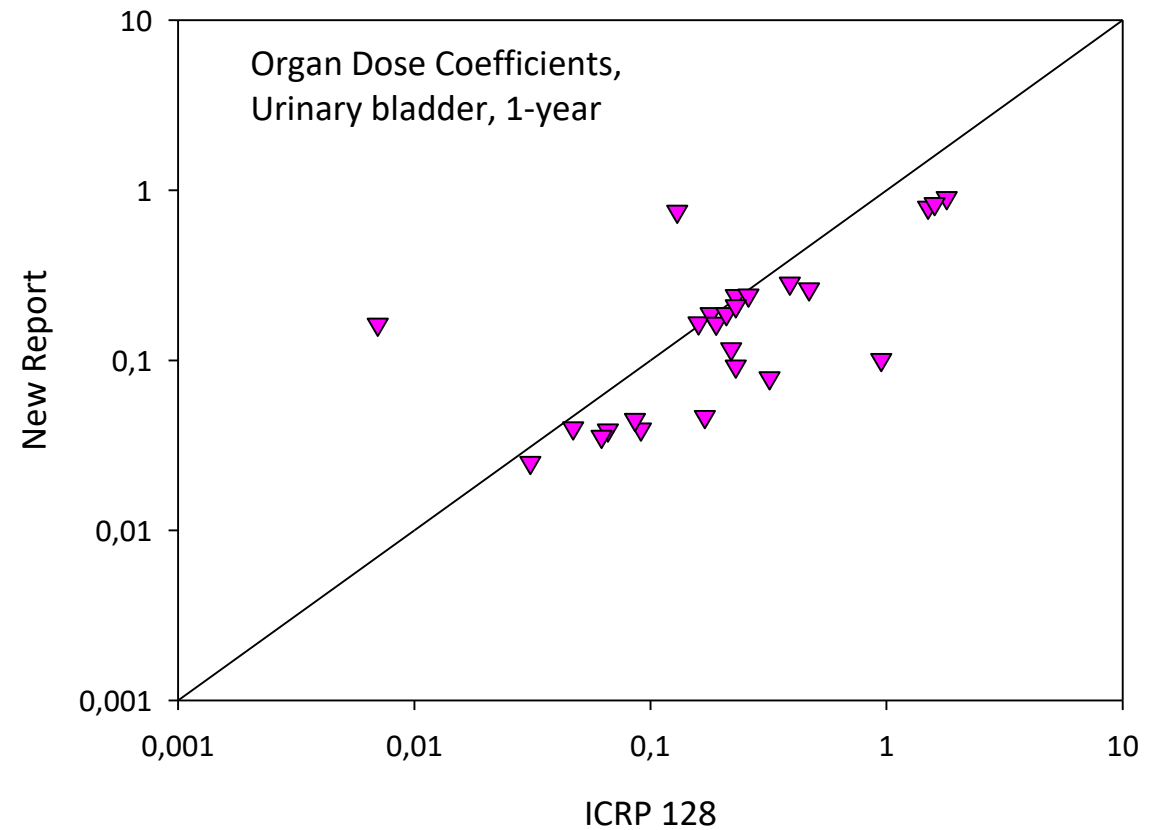
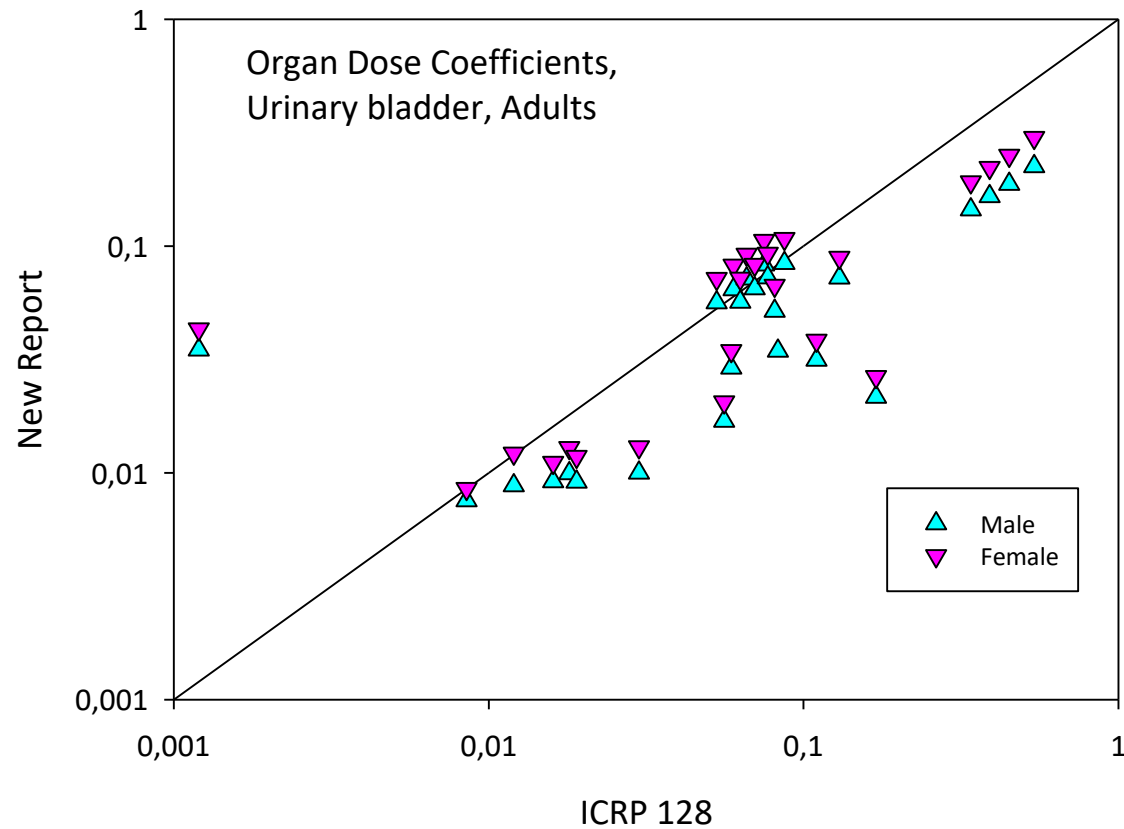
Realistic source region (“tumour” in a breast instead of the whole breast)



Main Trends (1): Red Bone Marrow



Main Trends (2): Urinary Bladder Wall



Main Trends (3): Effective Dose

