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(54) Title: RADIOLABELLED ALPHA-V BETA-3 AND/OR ALPHA-V BETA-5 INTEGRINS ANTAGONIST FOR USE AS THERAGNOSTIC AGENT

(57) Abstract: The present disclosure relates to αvβ3 and/or αvβ5 integrins antagonist radiopharmaceuticals and their use in a theragnostic approach for selection and therapy of human subjects with tumors overexpressing αvβ3 and/or αvβ5 integrins. In particular, the present disclosure relates to a pharmaceutical composition of αv ^{177}Lu radiolabeled αvβ3 and/or αvβ5 integrins antagonist, for use in treating tumors overexpressing αvβ3 and/or αvβ5 integrins in a human subject eligible for said treatment, wherein said subject has been selected for the treatment by PET/CT or PET/MRI or SPECT/CT or SPECT/MRI imaging with the same αvβ3 and/or αvβ5 integrins antagonist but with 68-Ga as radiometal for use as imaging agent.