

# Errata: Brain surface extraction from PET images with deformable model: Assessment using Monte Carlo simulator

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There was an error in the test-arrangement with the AIR combined with the exact anatomy in the case of Raclopride. This influences the Tanimoto-coefficient (TC) values that were given in Table II. (Only the row AIR in the case of Raclopride.) The correct TC values are provided in the Table below, and the error has been corrected in the forthcoming IEEE Transactions on Nuclear Science-paper *Assessment of Brain Surface Extraction from PET Images Using Monte Carlo Simulations*. The values that were erroneous are typed in **bold face** letters in the Table below, the values that are not in bold face are as in proceedings of IEEE medical imaging conference, 2003.

		FDG								
		image	1	2	3	4	5	6	7	mean
full reference volume	DM-DSM	$\lambda = 0.2$	.906	.904	.903	.902	.903	.902	.901	.903
		$\lambda = 0.3$	.908	.902	.902	.899	.903	.899	.896	.901
		$\lambda = 0.5$	.893	.895	.895	.891	.895	.895	.891	.893
	AIR+BSE		.894	.813	.813	.820	.814	.812	.887	.836
	AIR		.953	.948	.953	.952	.957	.963	.943	.953
	Raclopride									
	DM-DSM	$\lambda = 0.3$	.743	.766	.763	.780	.778	.774	.776	.769
		$\lambda = 0.5$	.787	.804	.797	.804	.805	.817	.808	.803
		$\lambda = 0.7$	.836	.835	.812	.839	.839	.834	.831	.832
	AIR+BSE		.833	.834	.833	.832	.834	.834	.859	.837
	AIR		<b>.998</b>	<b>.957</b>	<b>.957</b>	<b>.940</b>	<b>.956</b>	<b>.968</b>	<b>.969</b>	<b>.963</b>
ignoring  csf	FDG									
	DM-DSM	$\lambda = 0.2$	.944	.939	.938	.941	.939	.938	.941	.940
		$\lambda = 0.3$	.945	.938	.938	.940	.940	.935	.936	.939
		$\lambda = 0.5$	.932	.931	.930	.932	.932	.932	.933	.931
	AIR+BSE		.927	.835	.834	.835	.834	.839	.934	.863
	AIR		.966	.965	.961	.969	.964	.974	.959	.965
	Raclopride									
	DM-DSM	$\lambda = 0.3$	.753	.780	.778	.796	.794	.790	.792	.783
		$\lambda = 0.5$	.796	.822	.818	.824	.825	.831	.824	.820
		$\lambda = 0.7$	.846	.844	.831	.845	.848	.839	.842	.842
	AIR+BSE		.877	.872	.874	.874	.874	.877	.879	.875
AIR		<b>.999</b>	<b>.961</b>	<b>.961</b>	<b>.946</b>	<b>.960</b>	<b>.971</b>	<b>.972</b>	<b>.967</b>	

TABLE I

TANIMOTO COEFFICIENTS BETWEEN AUTOMATICALLY EXTRACTED BRAIN VOLUMES AND THE REFERENCE BRAIN VOLUMES. THE BRAIN VOLUMES WERE EXTRACTED FROM THE SEVEN RACLOPRIDE AND FDG IMAGES (CF. TABLE I) BY DM-DSM WITH DIFFERENT VALUES FOR  $\lambda$  AND WITH IMAGE REGISTRATION BASED METHODS USING THE KNOWLEDGE OF PRECISE (ANATOMICAL) REFERENCE BRAIN VOLUME (AIR) AND USING THE BRAIN VOLUME EXTRACTED USING BSE (AIR + BSE).