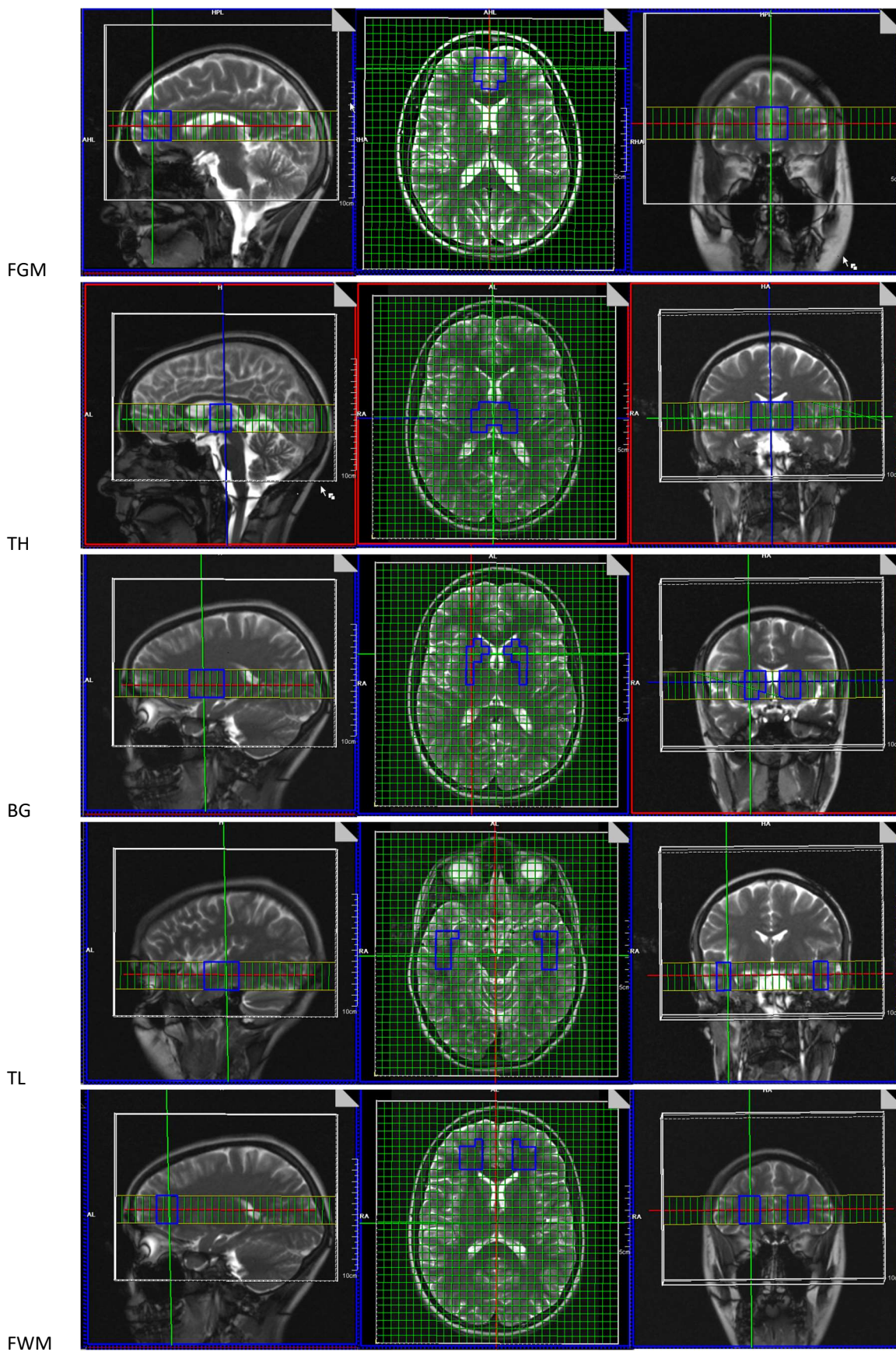


Impact of cannabis use on brain metabolism using ^{31}P and ^1H magnetic resonance spectroscopy

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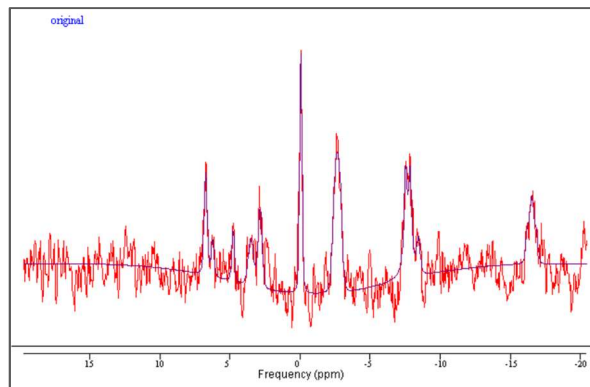
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Suppl_Fig1: Voxel placement for Phosphorus MRS

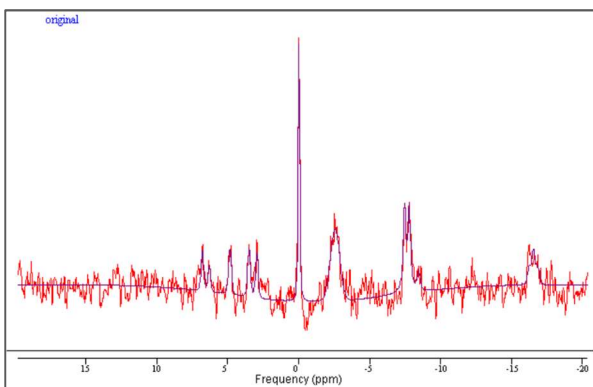


Graphical examples of voxel placement for Phosphorus MRS for each VOI of the right and left hemisphere

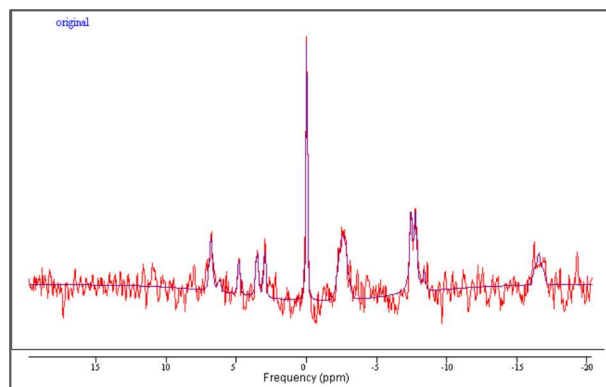
Suppl_Fig2: Evaluation of Phosphorus Spectra – examples



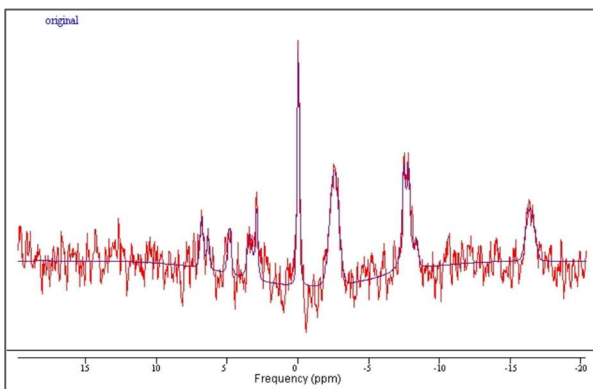
FGM



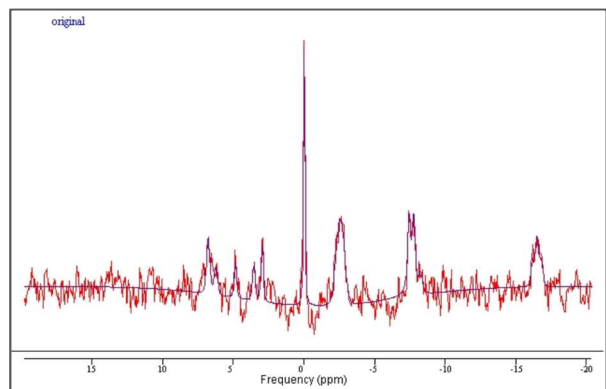
r_TH



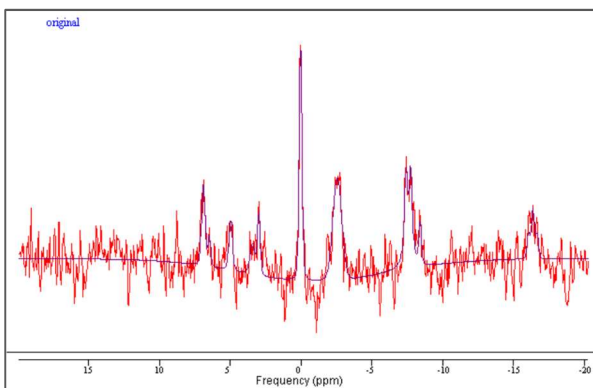
I_TH



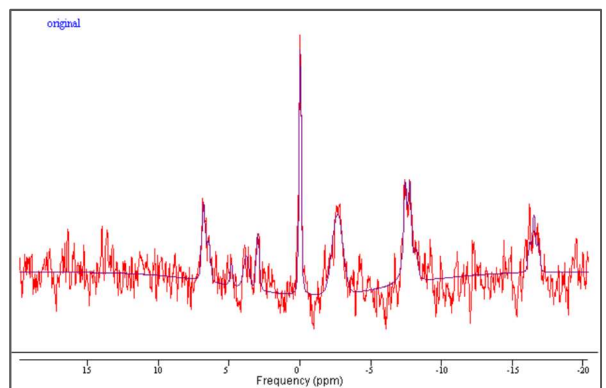
r_BG



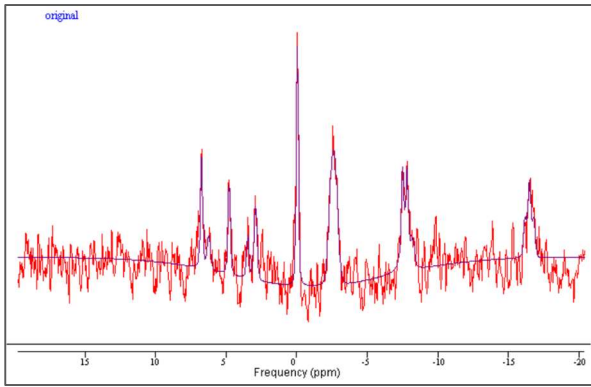
I_BG



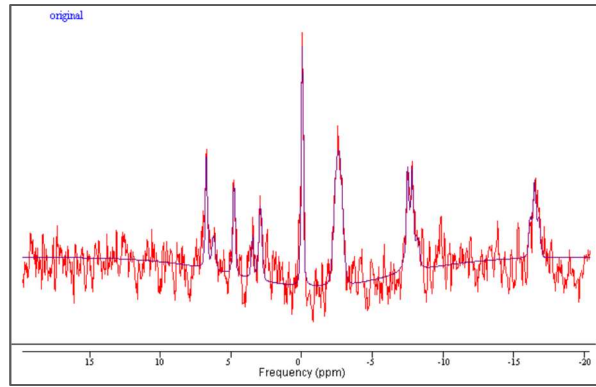
r_TL



I_TL



r_FWM



l_FWM

Representative phosphorus spectra from each VOI of the right and left hemisphere with metabolite fit using AMARES (jmrui software)

Suppl_Table2: Phosphorus MRS Data Quality – spreadsheet

	voxel size (ml) - right		
mean ± SD	fN	mN	mC
FGM	15.9 ± 2.4	15.8 ± 2.3	15.8 ± 2.2
r_TH	10.7 ± 0.8	10.9 ± 0.7	10.7 ± 0.9
r_BG	10.7 ± 0.8	10.4 ± 0.6	10.7 ± 0.8
r_TL	12.1 ± 0.3	12.2 ± 0.7	12.3 ± 0.6
r_FWM	9.6 ± 1.1	9.6 ± 1.0	9.5 ± 1.0

	voxel size (ml) - left		
mean ± SD	fN	mN	mC
FGM	15.9 ± 2.4	15.8 ± 2.3	15.8 ± 2.2
l_TH	10.7 ± 0.7	11.0 ± 0.7	10.9 ± 0.7
l_BG	10.6 ± 0.9	10.3 ± 0.7	10.7 ± 0.9
l_TL	12.0 ± 0.3	12.1 ± 0.6	12.3 ± 0.6
l_FWM	9.5 ± 1.1	9.5 ± 0.9	9.5 ± 0.9

	SNR - right		
mean ± SD	fN	mN	mC
FGM	5.1 ± 2.3	5.0 ± 1.8	4.5 ± 1.6
r_TH	11.8 ± 4.4	13.3 ± 3.3	12.1 ± 4.2
r_BG	8.3 ± 3.0	9.2 ± 2.8	8.4 ± 2.9
r_TL	6.9 ± 1.7	8.0 ± 2.2	7.3 ± 2.1
r_FWM	4.9 ± 1.7	5.9 ± 1.6	4.8 ± 1.2

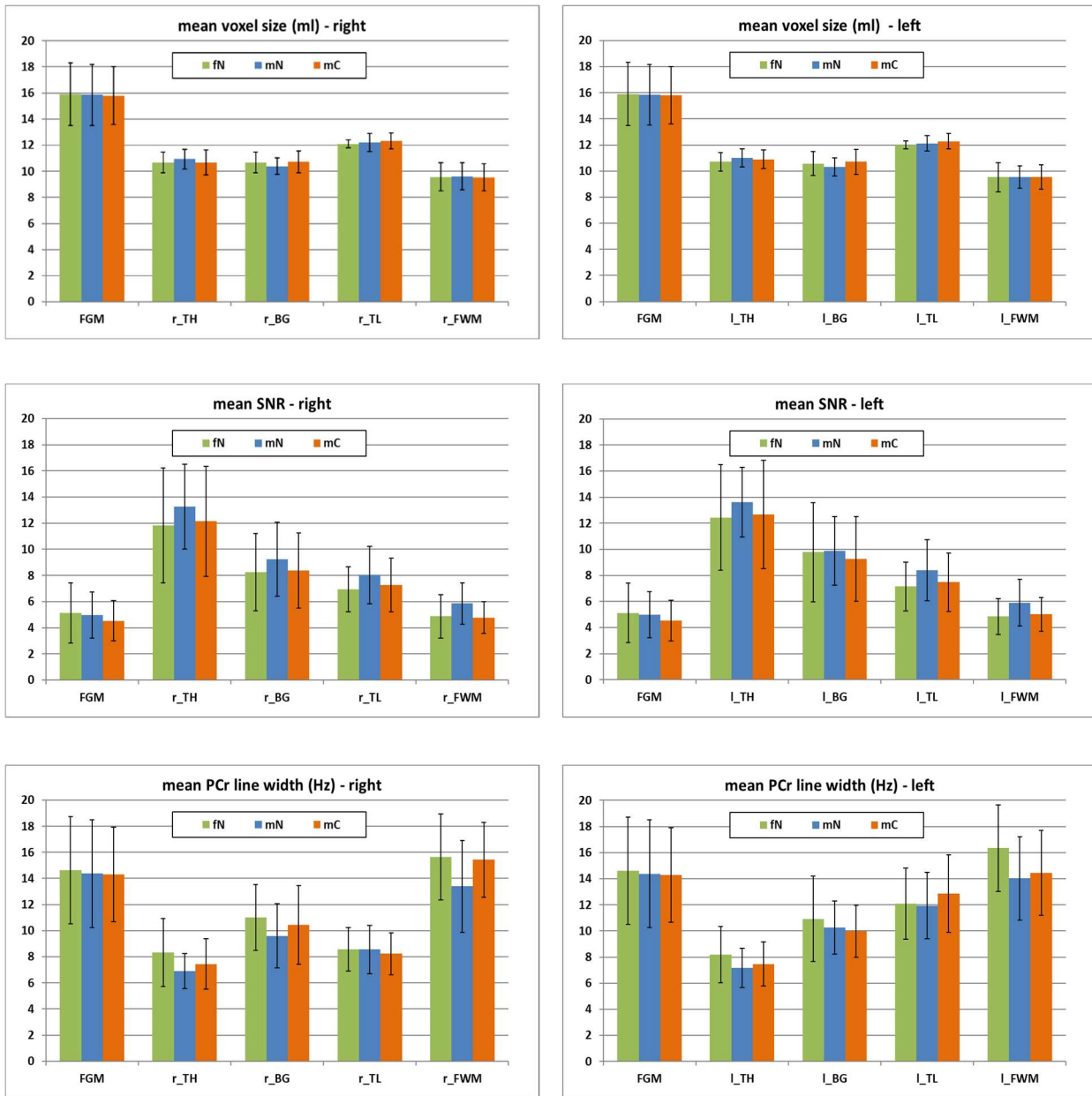
	SNR - left		
mean ± SD	fN	mN	mC
FGM	5.1 ± 2.3	5.0 ± 1.8	4.5 ± 1.6
l_TH	12.4 ± 4.0	13.6 ± 2.7	12.7 ± 4.2
l_BG	9.8 ± 3.8	9.9 ± 2.6	9.3 ± 3.2
l_TL	7.2 ± 1.9	8.4 ± 2.3	7.5 ± 2.2
l_FWM	4.9 ± 1.4	5.9 ± 1.8	5.0 ± 1.3

	PCr line width - right		
mean ± SD	fN	mN	mC
FGM	14.6 ± 4.1	14.4 ± 4.1	14.3 ± 3.6
r_TH	8.3 ± 2.6	6.9 ± 1.4	7.5 ± 1.9
r_BG	11.0 ± 2.5	9.6 ± 2.5	10.4 ± 3.0
r_TL	8.6 ± 1.7	8.6 ± 1.9	8.2 ± 1.6
r_FWM	15.7 ± 3.3	13.4 ± 3.5	15.4 ± 2.9

	PCr line width - left		
mean ± SD	fN	mN	mC
FGM	14.6 ± 4.1	14.4 ± 4.1	14.3 ± 3.6
l_TH	8.2 ± 2.2	7.2 ± 1.5	7.5 ± 1.7
l_BG	10.9 ± 3.3	10.3 ± 2.0	10.0 ± 2.0
l_TL	12.1 ± 2.7	11.9 ± 2.5	12.9 ± 3.0
l_FWM	16.3 ± 3.3	14.0 ± 3.2	14.4 ± 3.2

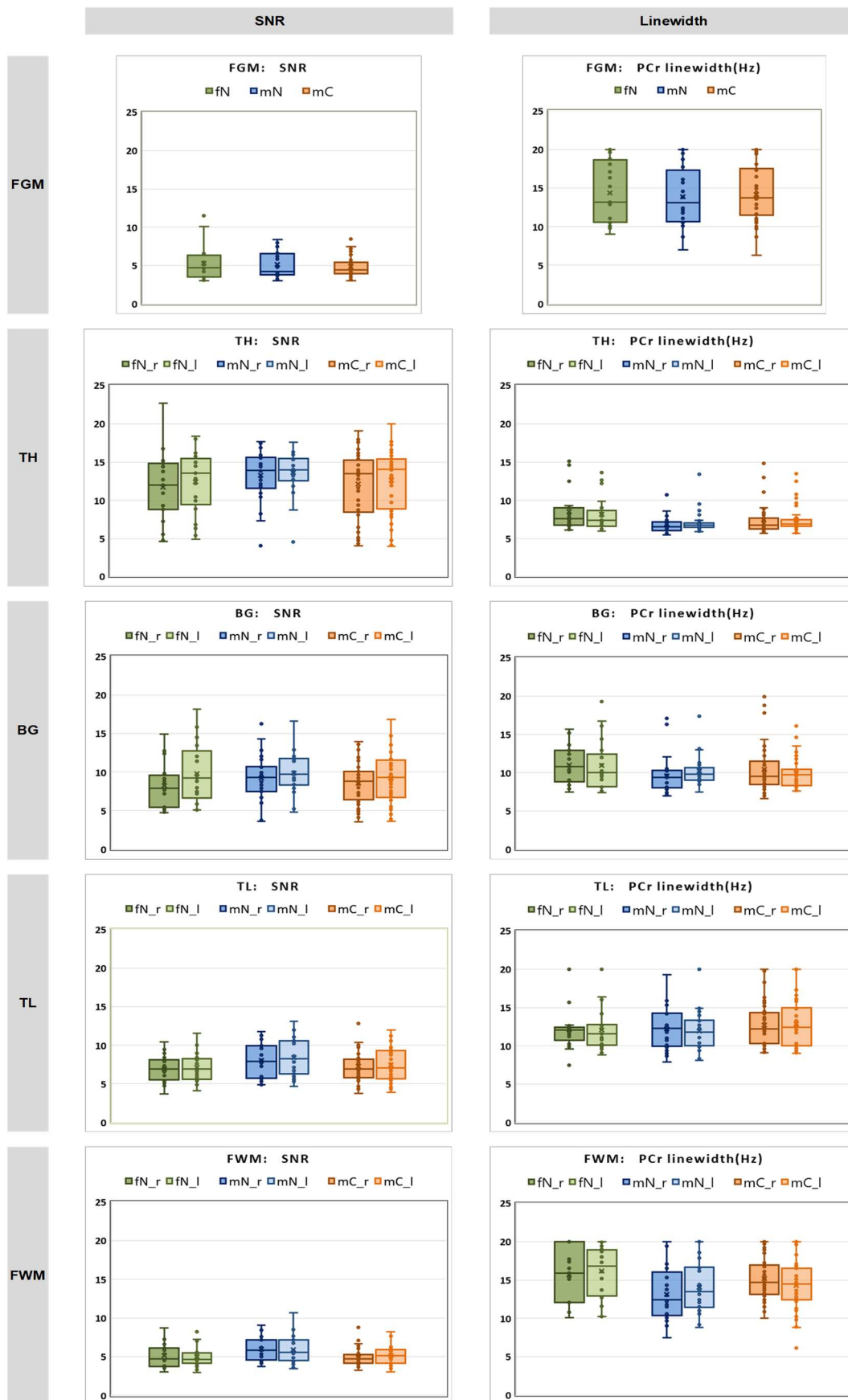
Mean values and standard deviation of voxel size, SNR and PCr line width of phosphorus spectra in each VOI of the right and left hemisphere for the three subject groups

Suppl_Fig3: Phosphorus MRS Data Quality – bar plot



Comparison of mean values of voxel size, SNR and PCr line width of phosphorus spectra in each VOI of the right and left hemisphere for the three subject groups

Suppl_Fig4: Phosphorus MRS Data Quality – box plot



Box plots describing the variation of SNR and PCr line width of phosphorus spectra in each VOI of the right and left hemisphere for the three subject groups