

Supplementary Table 1: CART-derived parameter rules from successful models

All lead data			
Technique	Subscore	CART correlation model rules	Brain regions and variables
FT	RVPI	9 when L30.bet < 47727 & L2.alp >= 610918 10 when L30.bet < 47727 & L2.alp < 610918 10 when L30.bet >= 47727 & L58.alp >= 56373 11 when L30.bet >= 47727 & L58.alp < 56373	lower right frontal alpha lower right frontal beta left temporal beta
MF-DFA	TPM	3 when L52.avgh >= 0.2 & L1.minh < 0.135 7 when L52.avgh >= 0.2 & L1.minh >= 0.135 8 when L52.avgh < 0.2 & L1.minh < 0.018 & L9.minh >= 0.1 & 9 when L52.avgh < 0.2 & L1.minh >= 0.018 & L9.minh >= 0.1 & L24.minh >= 0.13 10 when L52.avgh < 0.2 & L9.minh >= 0.1 & L24.minh < 0.13 12 when L52.avgh < 0.2 & L9.minh < 0.1	lower right frontal minimum h value middle left frontal minimum h value left temporal minimum h value right temporal average h value
Reduced lead set data			
Technique	Subscore	CART correlation model rules	Brain regions and variables
FT	RVPI	9.7 when L3.bet >= 124797 10.0 when L3.bet < 124797 & L26.bet < 34656 11.0 when L3.bet < 124797 & L26.bet >= 34656	middle right frontal beta left parietal/temporal beta
ITM	ACH	7.0 when L6L56.2 < 0.86 & L40.8 < -0.66 & L36.8 >= -0.67 8.0 when L6L56.2 < 0.86 & L40.8 < -0.66 & L36.8 < -0.67 9.3 when L6L56.2 < 0.86 & L40.8 >= -0.66 10.0 when L6L56.2 >= 0.86 & L31.1 < -0.27 & L3.1 < -0.46 11.0 when L6L56.2 >= 0.86 & L31.1 < -0.27 & L3.1 >= -0.46 14.0 when L6L56.2 >= 0.86 & L31.1 >= -0.27	middle frontal to left frontal 8 ms kappa ITCR middle right frontal at 4 ms kappa left parietal at 4 ms kappa right parietal at 32 ms kappa midline parietal at 32 ms kappa
	MAR	1.0 when L6.1 < -0.54 7.0 when L6.1 >= -0.54 & L26L36.768 < 1.2 & L3.1 < -0.58 9.9 when L6.1 >= -0.54 & L26L36.768 < 1.2 & L3.1 >= -0.58 12.7 when L6.1 >= -0.54 & L26L36.768 >= 1.2	midline frontal at 4 ms kappa left temporal to midline parietal at 3 s kappa ITCR middle right frontal at 4 ms kappa
	FMT	4 when L19L31.768 >= 1 & L36.1 < -0.5 8 when L19L31.768 >= 1 & L36.1 >= -0.5 & L3.1 >= -0.6 9 when L19L31.768 >= 1 & L36.1 >= -0.5 & L3.1 < -0.6 10 when L19L31.768 < 1 & L56.64 < -1.6 13 when L19L31.768 < 1 & L56.64 >= -1.6	left frontal to left parietal at 3 s kappa ITCR midline parietal at 4 ms kappa middle right frontal at 4 ms kappa lateral right frontal at 256 ms kappa
	RVPI	9 when L40.8 < -0.71 & L3.1 < -0.62 10 when L40.8 < -0.71 & L3.1 >= -0.62 10 when L40.8 >= -0.71 & L9.1 >= -0.17 11 when L40.8 >= -0.71 & L9.1 < -0.17	middle right frontal at 4 ms kappa right parietal at 32 ms kappa middle left frontal at 4 ms kappa
	TPM	5 when L9L56.16 >= 1.6 8 when L9L56.16 < 1.6 & L3L6.2 < 1 & L9.512 >= 3.8 & L36.1 < -0.39 9 when L9V56.16 < 1.6 & L3L6.2 < 1 & L9.512 >= 3.8 & L36.1 >= -0.39 10 when L9L56.16 < 1.6 & L3L6.2 < 1 & L9.512 < 3.8 12 when L9L56.16 < 1.6 & L3L6.2 >= 1	middle left frontal to lateral left frontal at 64 ms kappa ITCR middle right frontal to midline frontal at 8 ms kappa ITCR middle left frontal at 2 s kappa midline parietal at 4 ms kappa