ELECTRONIC SUPPLEMENTARY DATA

Accuracy of the CGM

Pearson’s correlation coefficients on CGM data indicated a strong positive linear association (r = 0.94, p < 0.001, SEE =0.65 mmol/l) between calibration capillary and interstitial CGM glucose (Figure 1a). Data were 263 paired calibration points, sampled across the three trials. The mean absolute difference (MAD) was 22.6%, which is considered optimal in regard to manufacturer standards. The Clark error grid analysis showed 92.8% and 6.8% of data pairs within the clinically-accepted ranges A and B, respectively, with 0.38% (one pair) in zone D (Figure 1b). A strong correlation (r = 0.98, p < 0.001, MAD 9.3%) was evident between plasma glucose and CGM, for 119 data pairs obtained from venous samples obtained on the morning and evening (3 days) of each experimental trial (Figure 2).
Figure 1. Evaluation of the accuracy of interstitial CGM from paired capillary samples, from the nine participants: (a) Pearson correlation of 263 pairs; (b) Clarke error grid of paired data showing 99.6% of data pairs were in the clinically accurate zones A and B.
Figure 2. Evaluation of the accuracy of interstitial CGM from venous plasma glucose paired samples, from the nine participants.