

$$S_{pred} = S_{res} \sqrt{1 + \frac{1}{n} + \frac{(x_i - \bar{x})^2}{SS_x}}$$

$$se_{y_{fit}} = S_{res} \sqrt{\frac{1}{n} + \frac{(x_i - \bar{x})^2}{SS_x}}$$

Figure 5.3 Equations for the calculation of the standard deviation of individual Y values around the regression line (S_{pred}) (used in the calculation of the prediction interval) and the standard error of Y_{fit} (used in the calculation of the confidence interval). S_{res} = standard deviation of the residuals, SS_x = sum of squares of X.

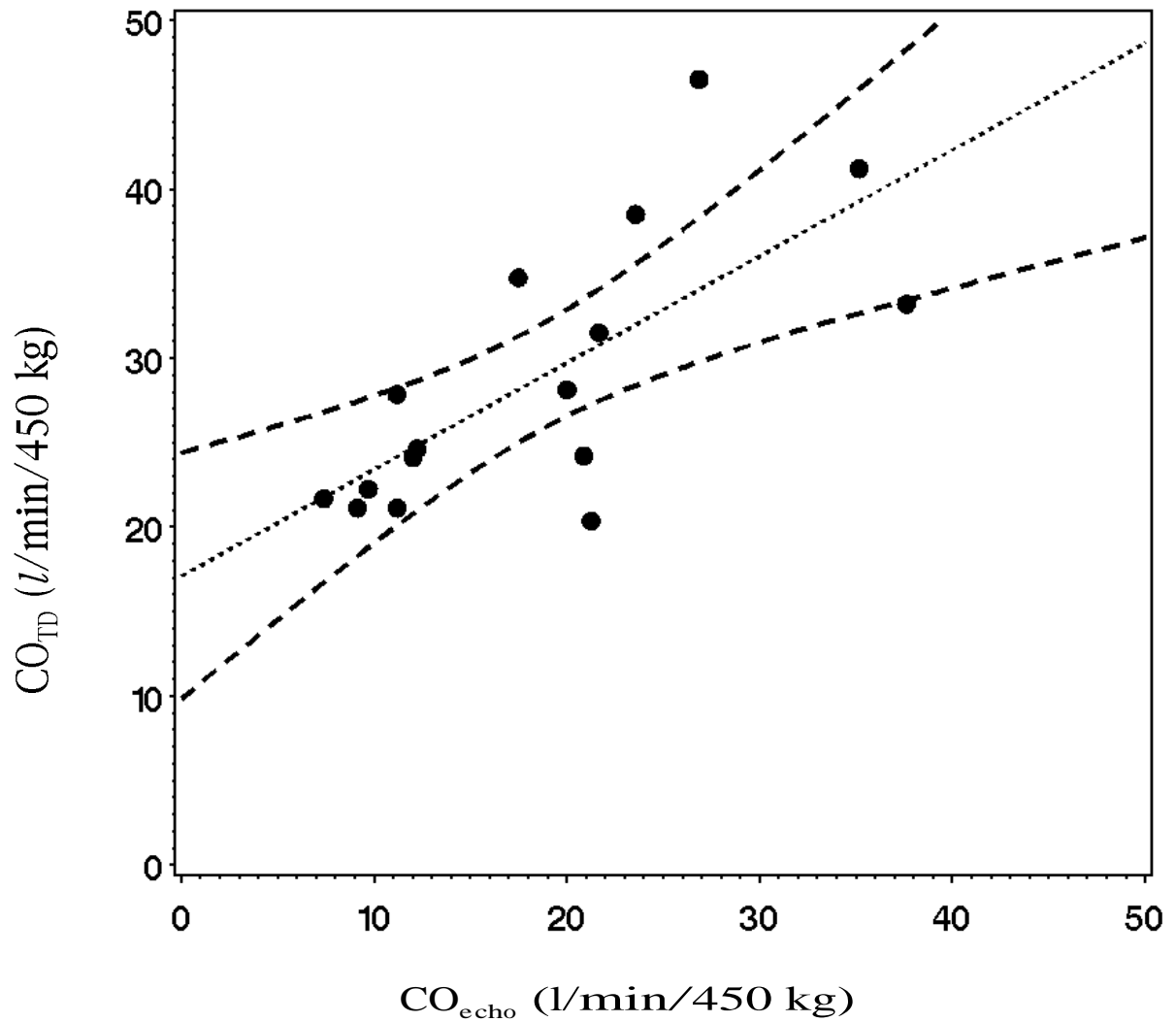


Fig. 5.4 Cardiac outputs (l/min/450 kg) as determined by simultaneous thermodilution and M-mode echocardiography, plotted with the predictive regression equation $CO_{TD} = (0.63 \pm 0.157) * CO_{echo} + (16.6 \pm 3.22)$ and the 95% confidence interval.

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