**How does continuous monitoring of time-dose response of oxygen delivery affect perfusionist performance on cardiopulmonary bypass?**

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 A growing body of evidence is being compiled to support the use of oxygen delivery (ecDO2i) and time-dose response (TDR) as a metric for goal directed perfusion to improve outcomes for cardiopulmonary bypass (CPB) patients. ecDO2i is the calculated volume of oxygen being delivered per minute based on body surface area (BSA). TDR for ecDO2i is a calculation of the total amount of time below a threshold ecDO2i that is compounded by how far below that goal your ecDO2i is minute by minute. TDR gives a numerical value to the area under the curve where ecDO2i goals were not met throughout a given case. This retrospective study aims to see how perfusionist performance is affected by continuous monitoring of ecDO2i and TDR. Real-time monitoring is provided via the Quantum workstation (Spectrum Medical, Cheltenham UK) along with compliance alerts that notify the perfusionist when ecDO2i falls below 260 ml/min/m2. Perfusionist parameters studied include: flow, pressor usage, units transfused, and TDR.