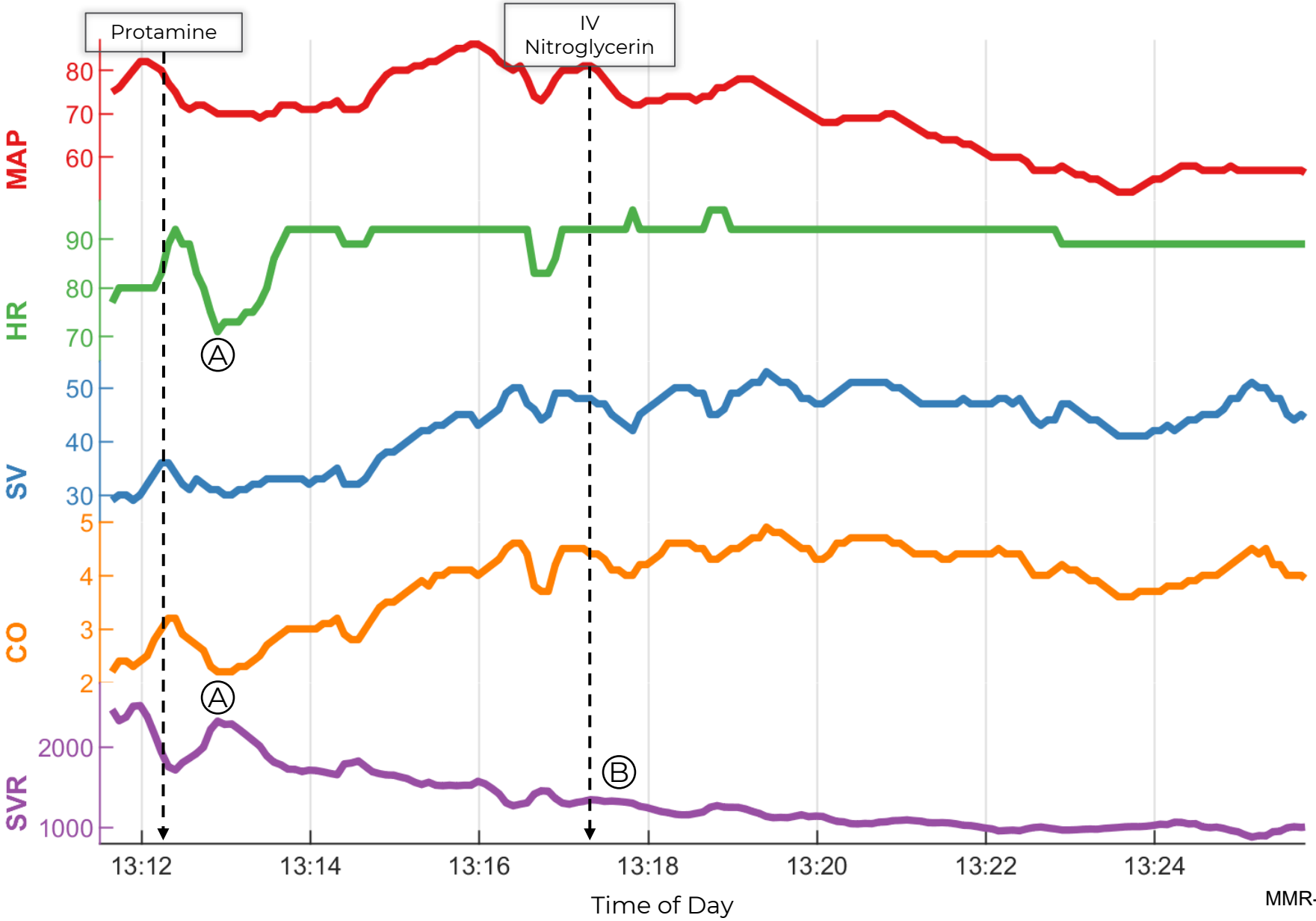
CABG

Protamine administration followed by Isoflurane, Propofol and IV Nitroglycerin

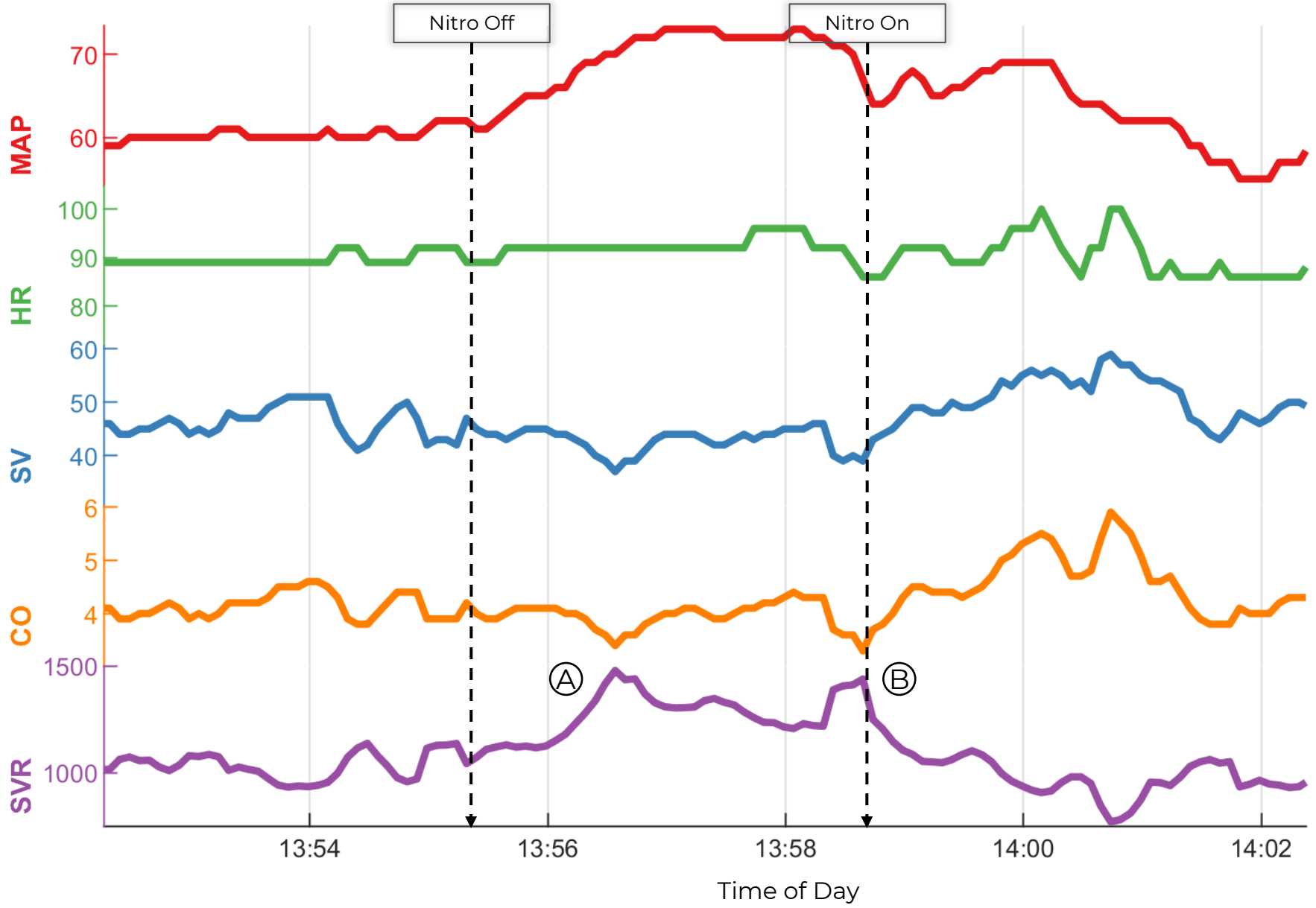
Argos Case Study



A) Protamine is a standard therapy during CABG surgery and hemodynamic responses (i.e., small decreases in systemic blood pressure) to protamine are common. Argos followed a change in HR from 90 to 70, which coincided with an increase in SVR following protamine administration.

B) To maintain a low MAP per the surgeon's request, Argos shows a trend of decreasing SVR coincident with a decreasing MAP, following the administration of IV nitroglycerin which is used primarily as a vasodilator.

RETIA MEDICAL



A) With IV nitroglycerin turned off, the vasodilatory effects are reversed and SVR and MAP increases as shown on the Argos.

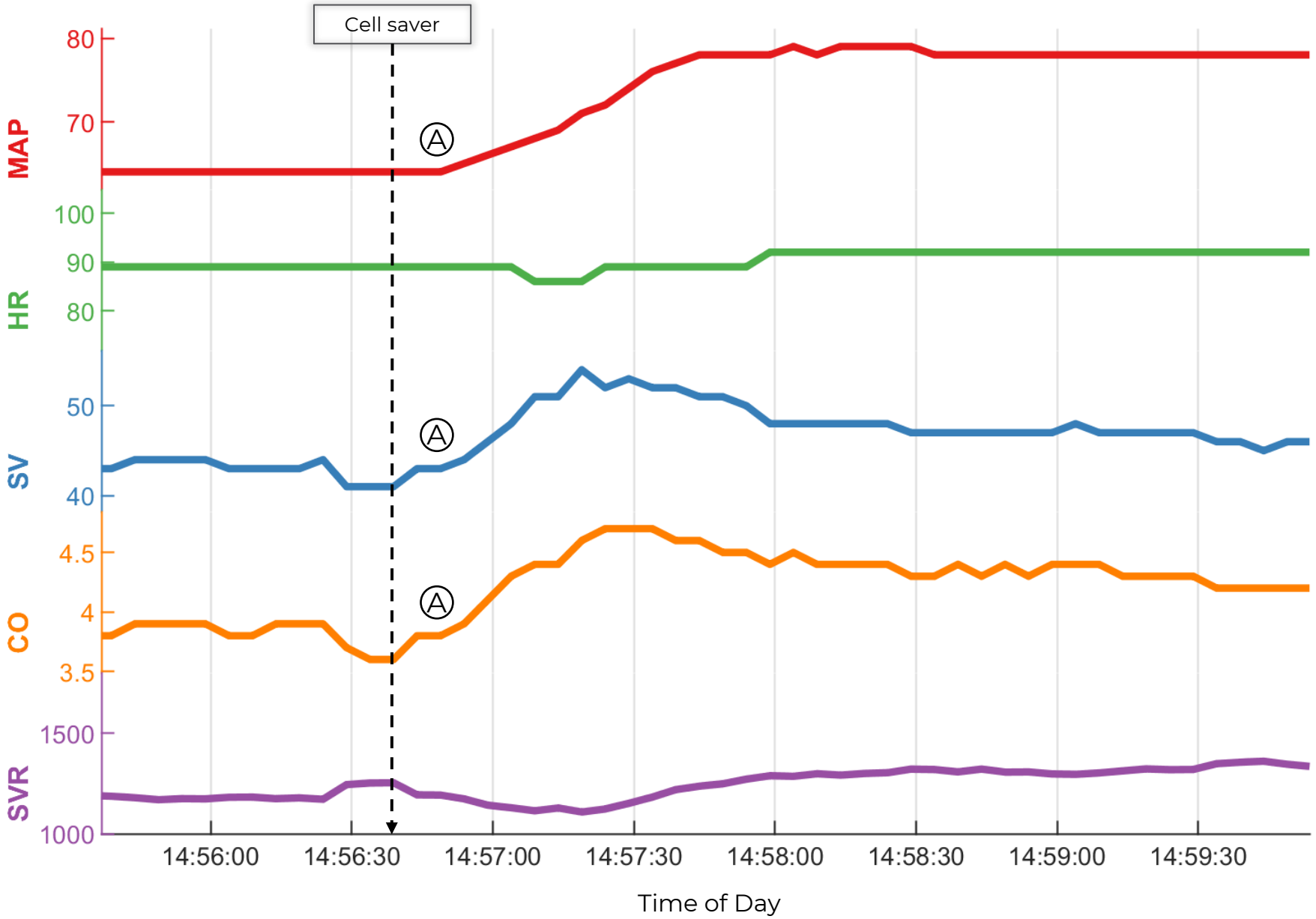
B) As MAP reaches above target threshold, IV nitroglycerin is resumed, SVR decreases with vasodilation and correspondingly MAP also decreases. Using Argos can help determine the timing of when to start/stop vasoactive therapy based on therapeutic targets.

RETIA MEDICAL

CABG

Cell Saver Blood through Rapid Infuser

Argos Case Study



A) To correct for hypotension as a result of intravascular volume loss, cell saver blood was transfused through a rapid infuser. CO, SV, and correspondingly MAP increase as shown on the Argos indicating the patient was preload responsive. At the end of the infusion, Argos confirms that the patient is no longer fluid responsive through a stable trend in CO, SV and MAP.

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	MAP	HR	SV	CO	SVR
Time within Normal Range	54%	100%	10%	66%	51%
Normal Range:	70 – 105 mmHg	60 – 100 bpm	60 – 100 ml/beat	4.0 – 8.0 lpm	800 – 1200 dynes
↓ / ↑	52 / 112	71 / 104	14 / 78	1.4 / 7.1	769 / 3629
Avg:	73	88	48	4.2	1244

The low SV is offset by a high-normal HR to maintain CO within normal threshold for most of the case. Maintaining the delicate hemodynamic balance in cases where a low-target blood pressure is desired, requires accurate and responsive data. The Argos Cardiac Output Monitor provides hemodynamic insight to inform decisions on when to start and stop vasoactive medications based on therapeutic targets.