considered to indicate statistical significance. Analysis was performed using SPSS Version 23.0 software.

**Results:** The patient's age was found to be comparable in both the groups (p=0.19). There was not any statistically significant difference seen in lactate (p=0.085) or pH (p=0.89) values between the two groups. Electrolyte levels were well maintained within normal limits in both PL and SF groups except calcium which was significantly higher in SF group post surgery(p<0.001). Difference in heart rate and mean blood pressure was found to be insignificant at all time points. Blood loss during the surgery was also similar in both the groups (p=0.937).

**Conclusion:** Both PL and SF balanced crystalloid solutions can be safely recommended as an intraoperative fluid in major oncological surgeries. Both the fluids effectively maintain the pH and significantly decrease the incidence of lactic acidosis during cancer surgeries. Calcium levels are better maintained with the infusion of Sterofundin solution.

**KEYWORDS:** Oncosurgery, Plasmalyte TM, Sterofundin TM, Lactic acidosis

## **ABSTRACT NO.: ABS0288**

Comparison of the effect of two balanced crystalloid intraoperative (intravenous) solutions (PlasmalyteTM versus Sterofundin TM) on lactate levels during major cancer surgeries.

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**Background &Aims:** Use of balanced fluids as intraoperative fluids substantially decrease the incidence of lactic acidosis; especially after major cancer surgeries. Aim of present study was to compare the effects of two acetate based balanced solutions, PlasmalyteTM and SterofundinTM on lactate, pH, electrolytes and haemodynamics after major onco-surgery.

Methods: In this prospective randomised parallel group study, 60 patients undergoing major onco surgeries were randomised in one o fthe two groups to receive either PlasmalyteTM (PL) (30 patients) or SterofundinTM (SF) (30 patients) as an intraoperative fluid. Arterial Blood Gas analysis (ABG) was sampled before surgery (Baseline) and at the time of haemostasis (Post surgery). Heart rate and mean blood pressure were noted every 30 minutes. Blood loss during surgery was replaced with either colloid or blood. Descriptive statistical analyses, including mean and standard deviation for continuous variables, and count and percentage for categorical variables was performed. Student t-test was used to compare continuous variables and Fisher's exact test was used for categorical variables. p <0.05 was

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