**Within-Hospital and 30-Day Outcomes in Patients Undergoing Invasive Coronary Angiography with Different Low-Osmolar Iodinated Contrast Media: A Retrospective Multicenter Observational Cohort Study of 107,994 Patients**

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**Background:** As outcomes after exposure to low-osmolar contrast media (LOCM) are incompletely examined, we compared groups exposed to three LOCM agents during invasive coronary angiography (ICA) and/or percutaneous coronary interventions (PCI).

**Methods:** From the Premier Perspective Database, we identified 107,994 adults without prior hemodialysis undergoing ICA and/or PCI with iohexol, iopamidol or ioversol. We created a propensity score for contrast type including: age, gender, comorbidities, illness severity, physician specialty, and procedure type. Propensity matching was performed 1:1 for iohexol (n=10,204) and iopamidol (n=10,204), and for iohexol (n=19,482) and ioversol (n=19,482). Between matched groups, we compared in-hospital mortality or hemodialysis, length of stay (LOS), and 30-day readmission for contrast-induced nephropathy (CIN).

**Results:** Between propensity-matched individuals exposed to iohexol vs. iopamidol or ioversol, no differences were observed for in-hospital hemodialysis or mortality, or 30-day readmission for CIN (Figure). There were no differences in LOS between patients exposed to iohexol vs. iopamidol (2.9 ±2.7 vs. 2.9 ±2.7 days, p=0.05) or iohexol vs. ioversol (2.8 ±2.6 vs. 2.9 ±3.1 days, p=0.35).

**Conclusions:** For patients undergoing ICA and/or PCI exposed to alternate LOCM, in-hospital death, need for hemodialysis, or re-admission for CIN are uncommon, with no apparent clinical advantage between agents.

Figure. Outcomes between LOCM Agents.