

# Left Renal Vein Division During Open Abdominal Aortic Aneurysm Repair

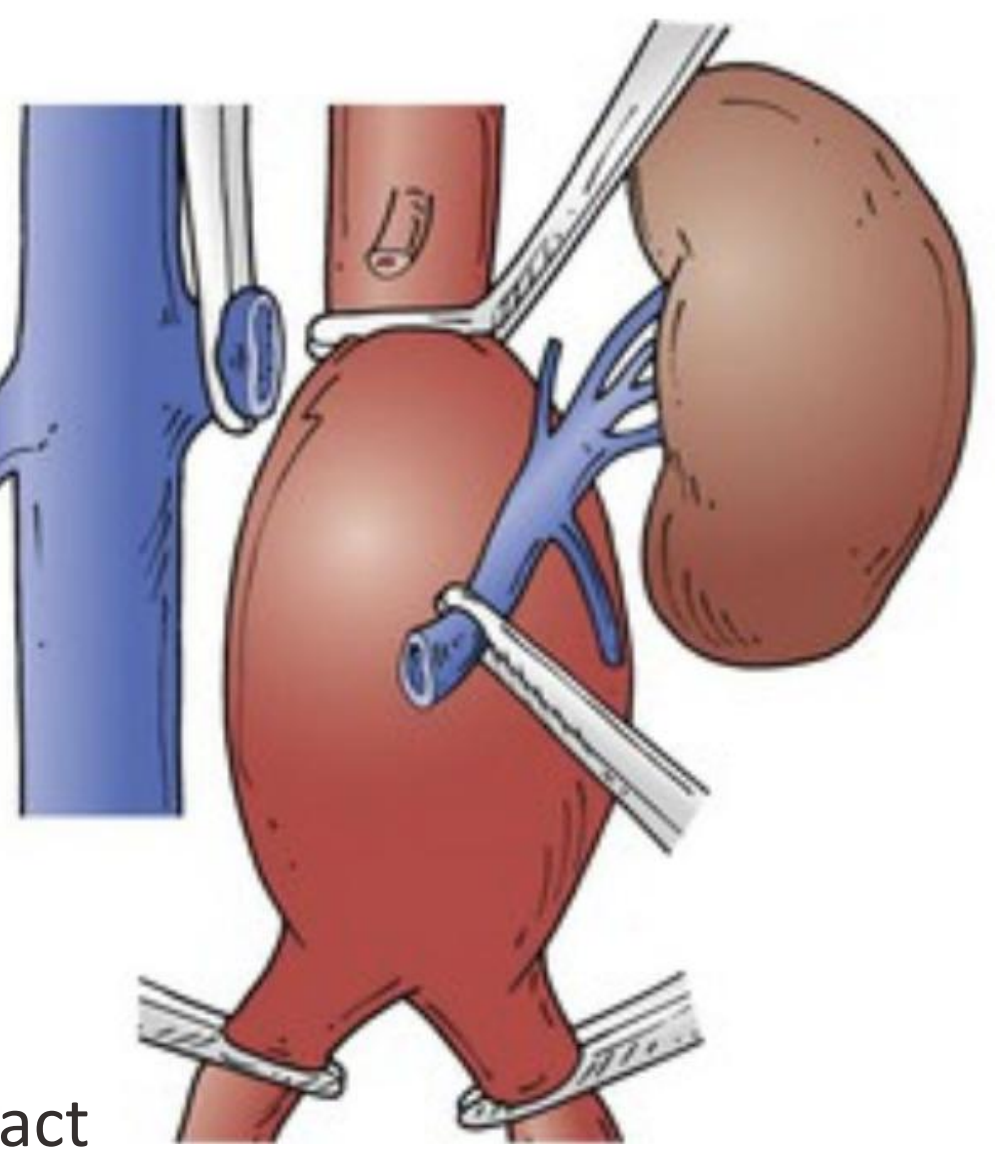


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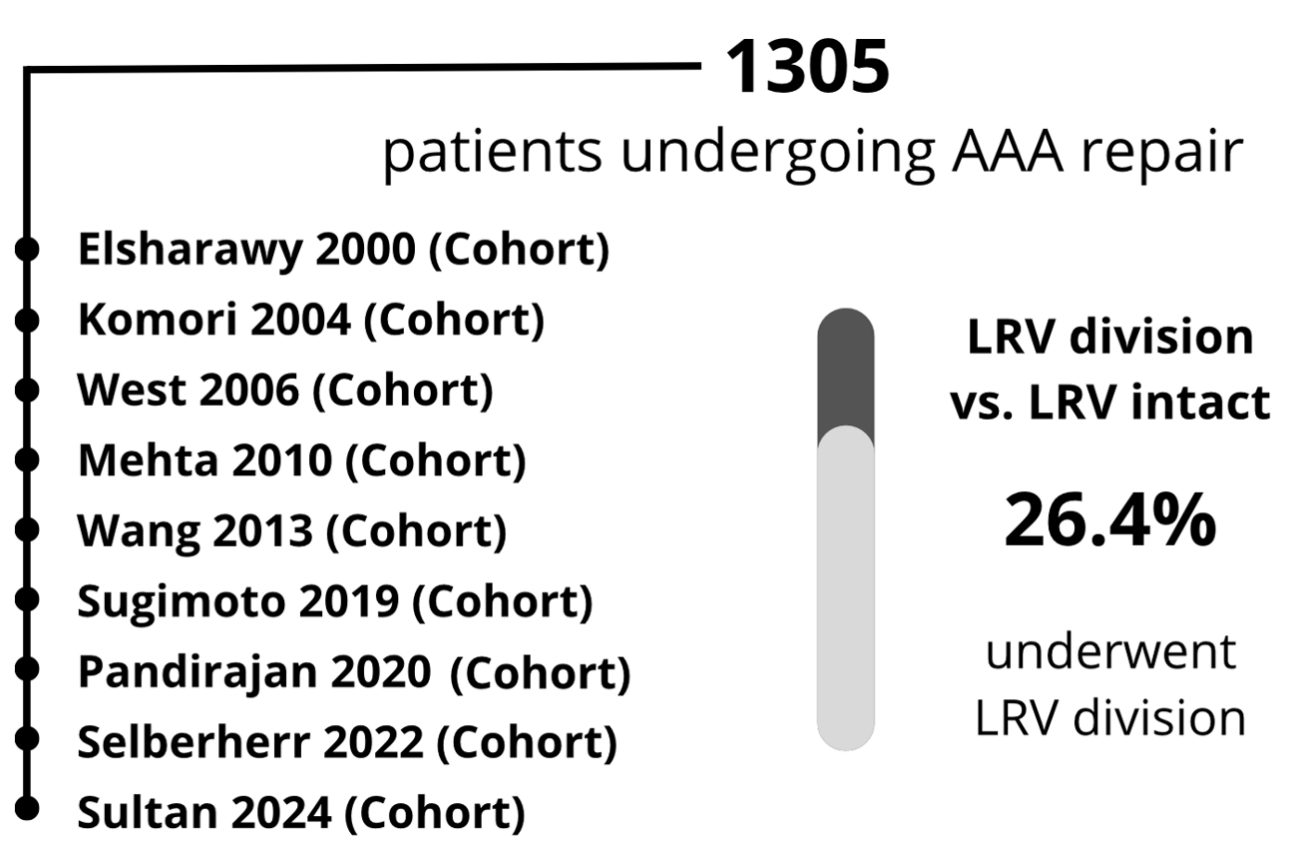
## Background

- Left renal vein (LRV) division, first described in 1967, is an important maneuver to improve proximal exposure during open abdominal aortic aneurysm (AAA) repair
- Collateral venous drainage through the gonadal, lumbar, and adrenal veins may preserve renal venous outflow after LRV division
- However, evidence regarding the impact of LRV division on postoperative mortality and renal outcomes remains controversial



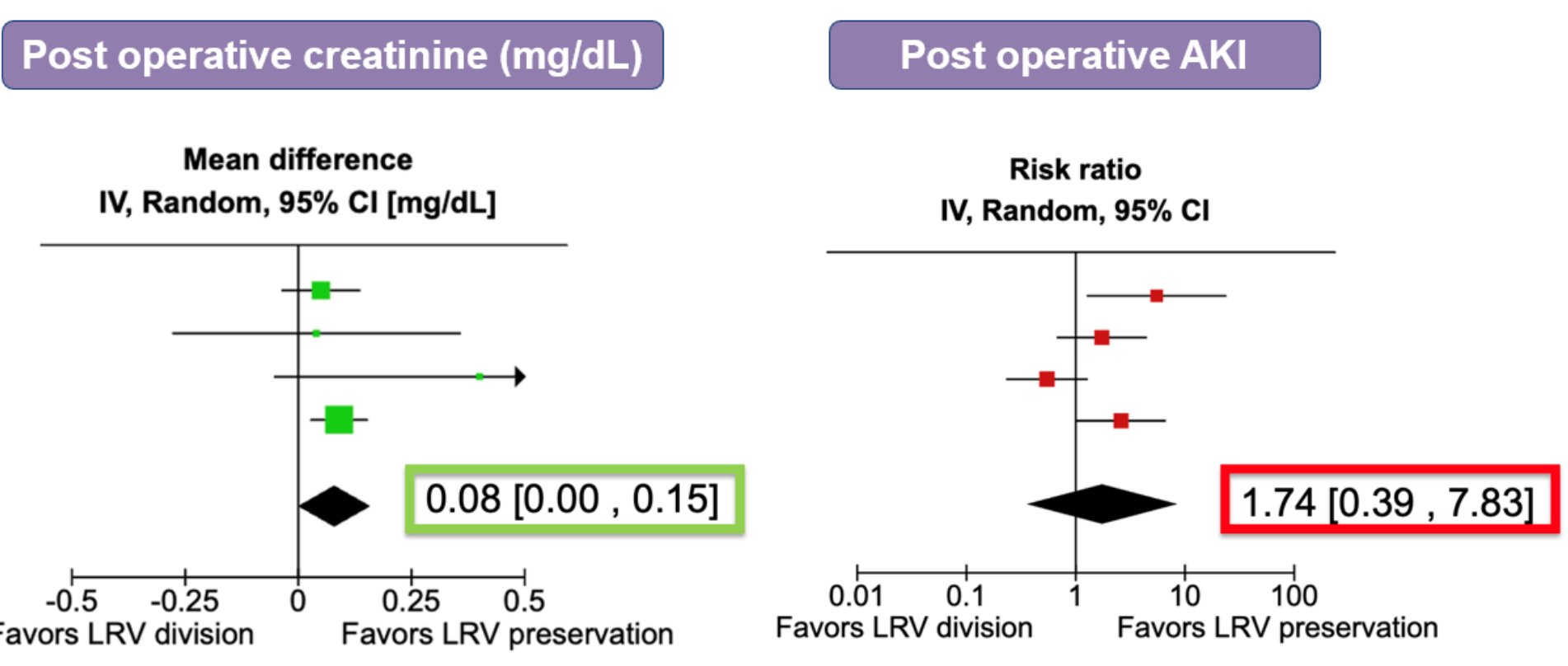
## Results

- Of the 258 records, 9 observational studies met inclusion criteria including 1,305 patients
- Mean age: 66.5–75.5 years
- Follow-up: 1.5–51 months



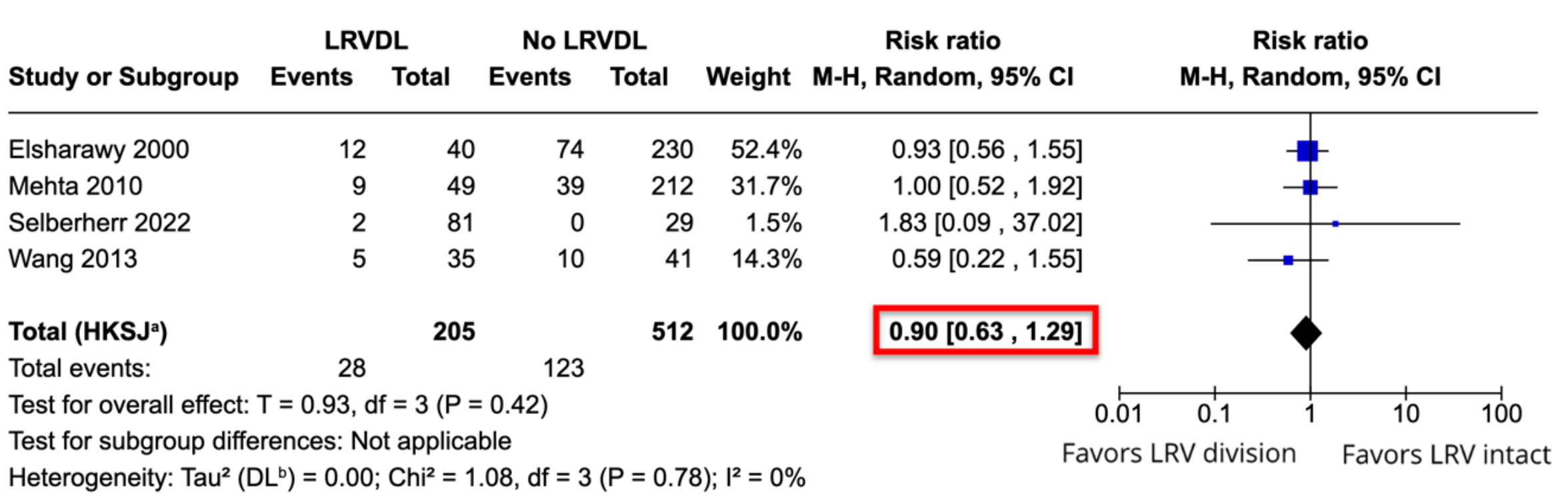
## In-hospital Renal Outcomes

- LRV division was associated with a small increase in postoperative serum creatinine (MD +0.08 mg/dL)
- This increase did not translate into higher rates of AKI



## Thirty-day Mortality

- Thirty-day mortality was comparable between groups



**Objective:** to evaluate the impact of LRV division on mortality and renal outcomes after open AAA repair

## Methods

- Systematic review and meta-analysis
- PubMed, EMBASE, and Cochrane searched through December 29, 2024
- Dual independent screening and data extraction
- Random-effects meta-analysis

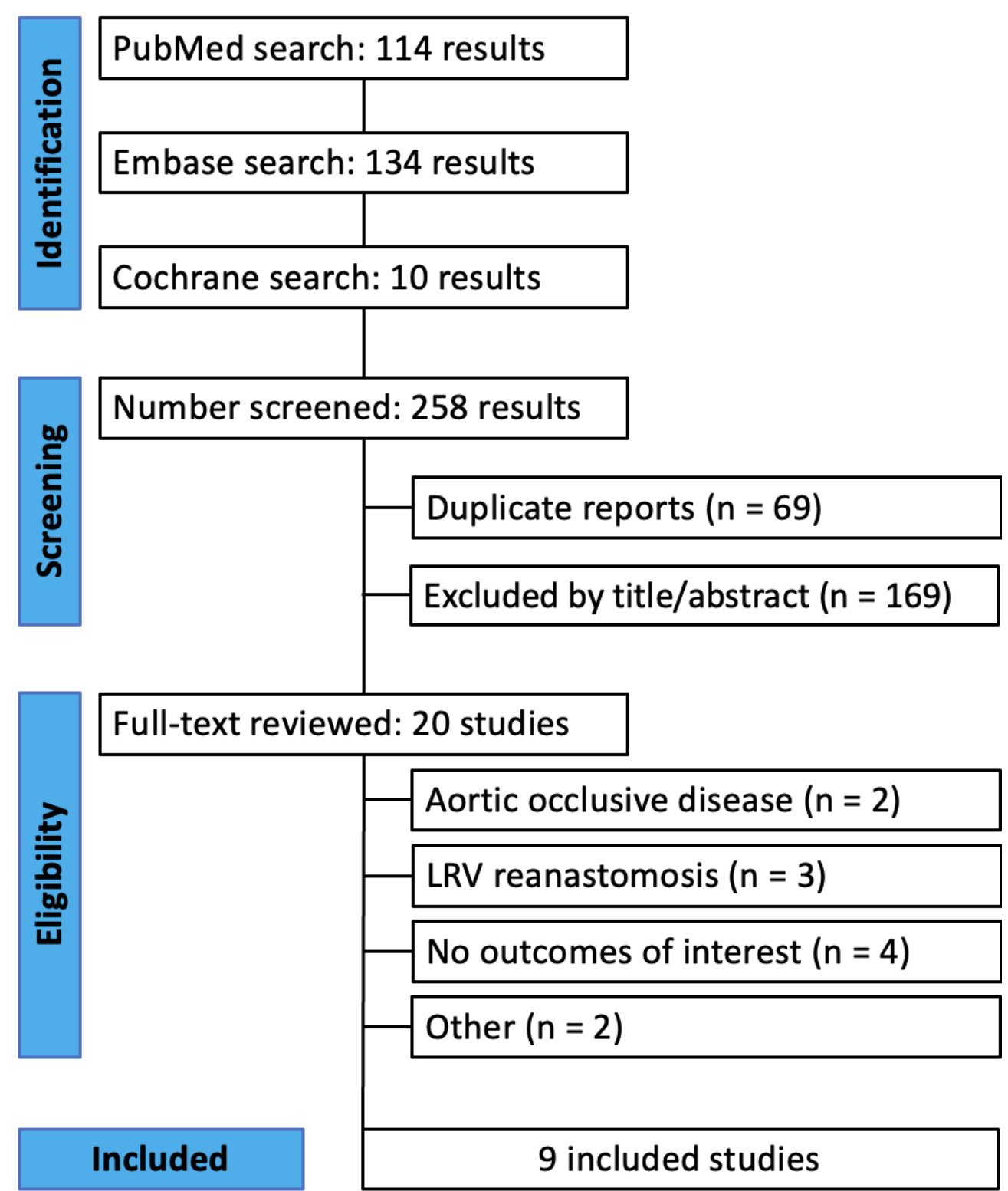
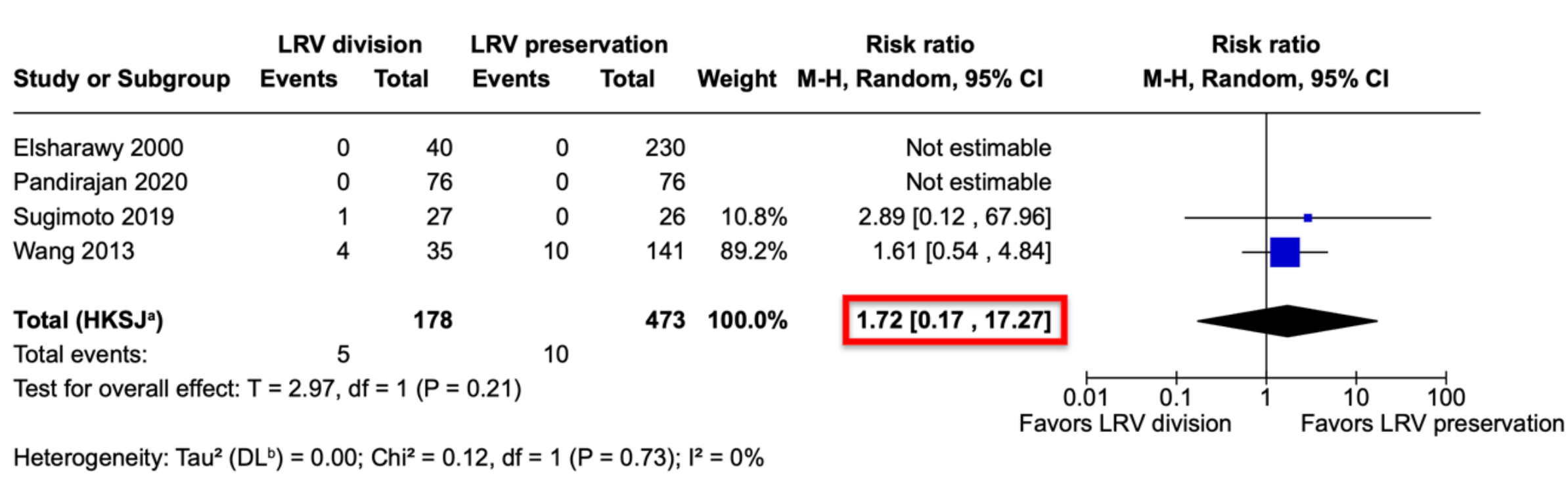


Figure 1. PRISMA flow diagram of study screening and selection

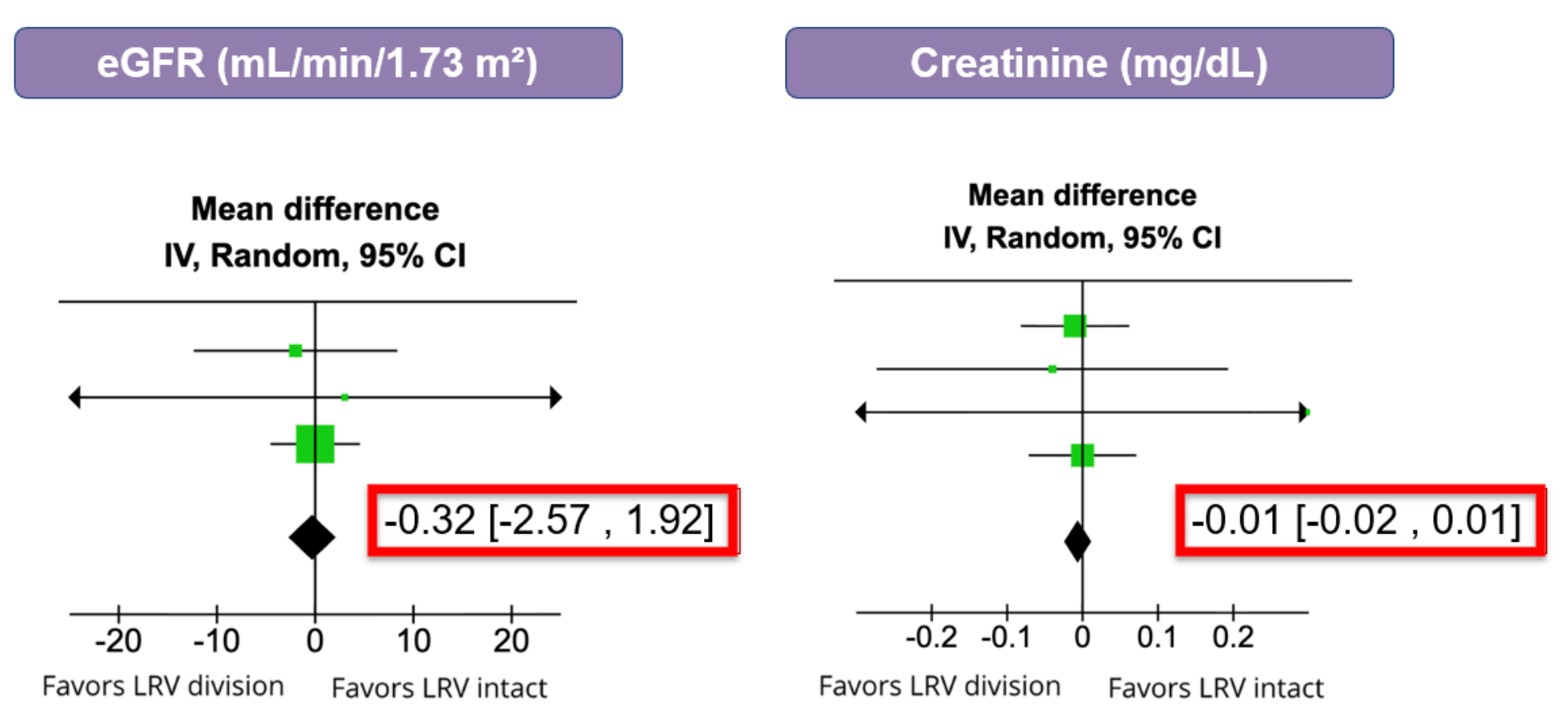
## Postoperative Dialysis

- Postoperative dialysis requirement was uncommon and did not differ between groups



## Renal Outcomes at Discharge

- Renal function at discharge was comparable between groups



## Take Home Message

LRV division appears to be a safe adjunct during open AAA repair and was not associated with increased mortality or clinically meaningful deterioration in renal outcomes