Full-text articles excluded, with reasons:

1. Asymptomatic/sub-threshold patients (n = 4)
2. Frailty only measured post-intervention (n = 2)
3. No frail vs non-frail comparison (n = 11)
4. Non-frail patients not included (n = 4)
5. ‘Pre-frail’ not frail patients included (n= 2)
6. Vascular patients not reported separately (n = 15)
7. Included vascular trauma patients (n = 1)
8. No measure of frailty (n = 22)
9. No associations or outcomes reported (n = 3)
10. Review article (n = 9)
11. Letter or editorial (n = 3)
12. Study/data reported elsewhere (n = 9)

Records identified through database searching  
(n = 9678)

## Screening

## Included

## Eligibility

## Identification

Additional records identified through other sources  
(n = 6)

Records after duplicates removed  
(n = 4665)

Records screened (title & abstract) (n = 4665)

Records excluded  
(n = 4532)

Full-text articles assessed for eligibility  
(n = 138)

Studies included in narrative synthesis  
(n = 53)

Studies included in quantitative synthesis (meta-analysis)  
(n = 18)

**Figure 1:** Study selection flow diagram