

Simplified Diagnostic Management of Suspected Pulmonary Embolism

- the YEARS study -

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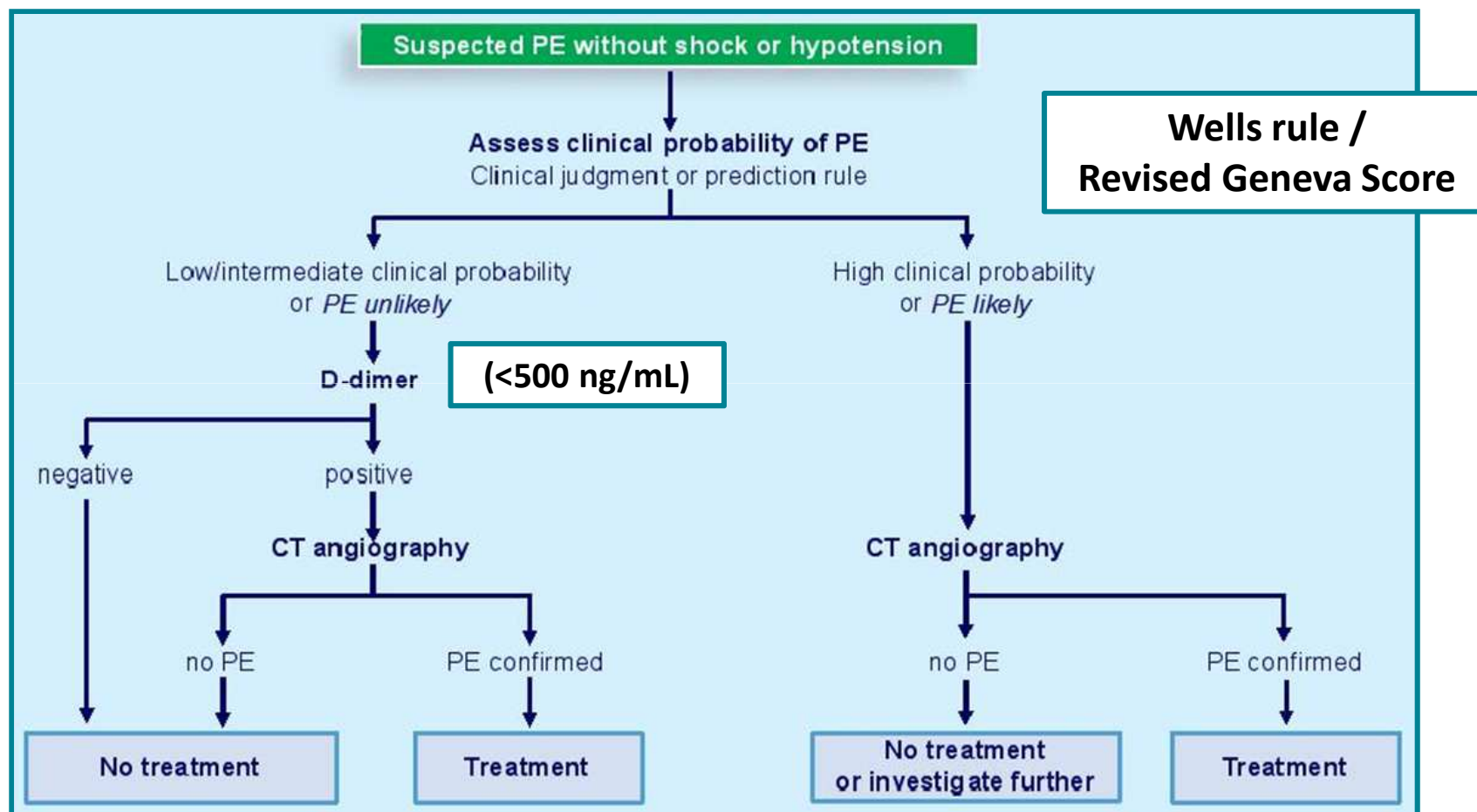


Declaration of Interest

- I have nothing to declare



Standard management



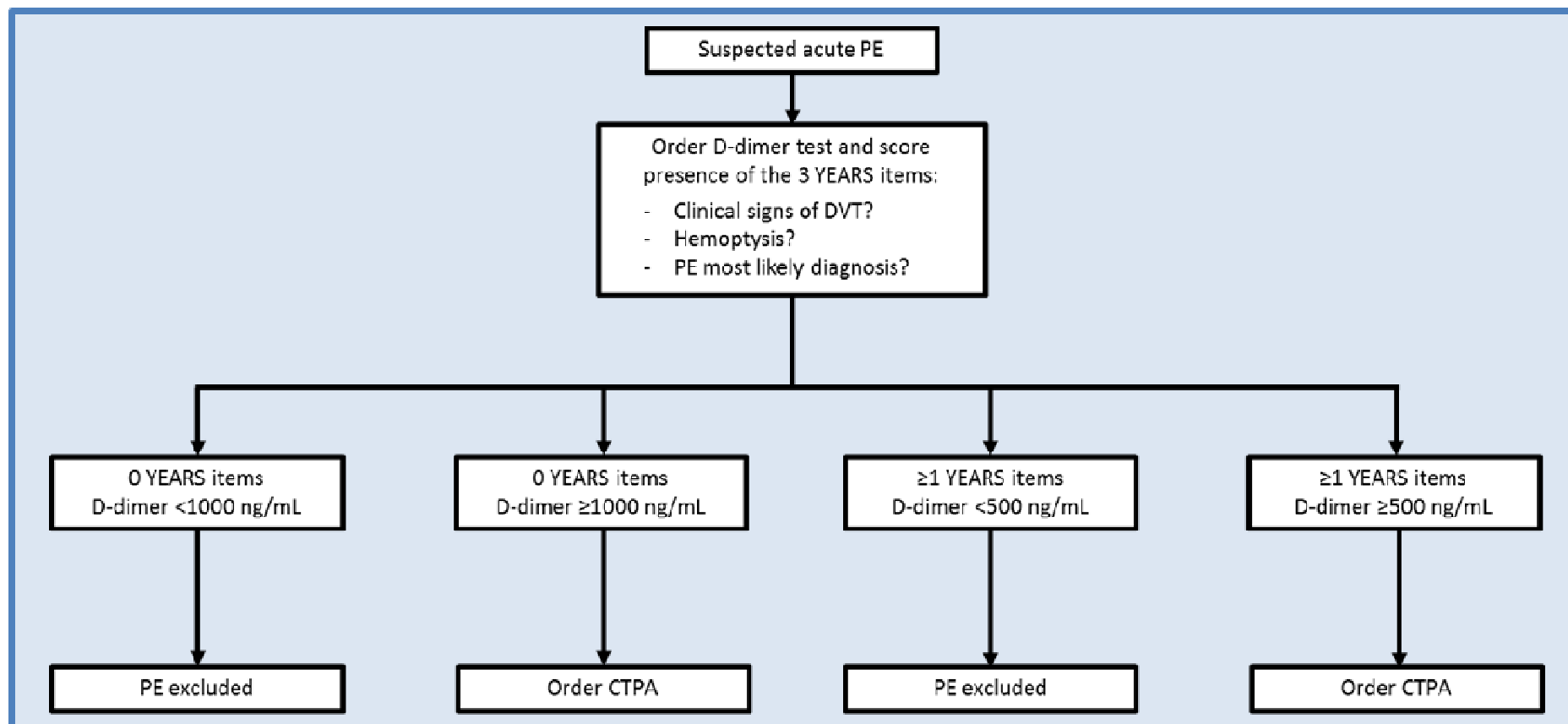
Standard management

- **No CTPA in 20-30% of patients, majority of CTPA still negative for PE**
- **3-month VTE risk <1.5%**
- **Adherence in clinical practice variable**
 - Complexity
 - Sequential testing
- **Consequences**
 - Unrequired CTPA
 - Higher failure rate

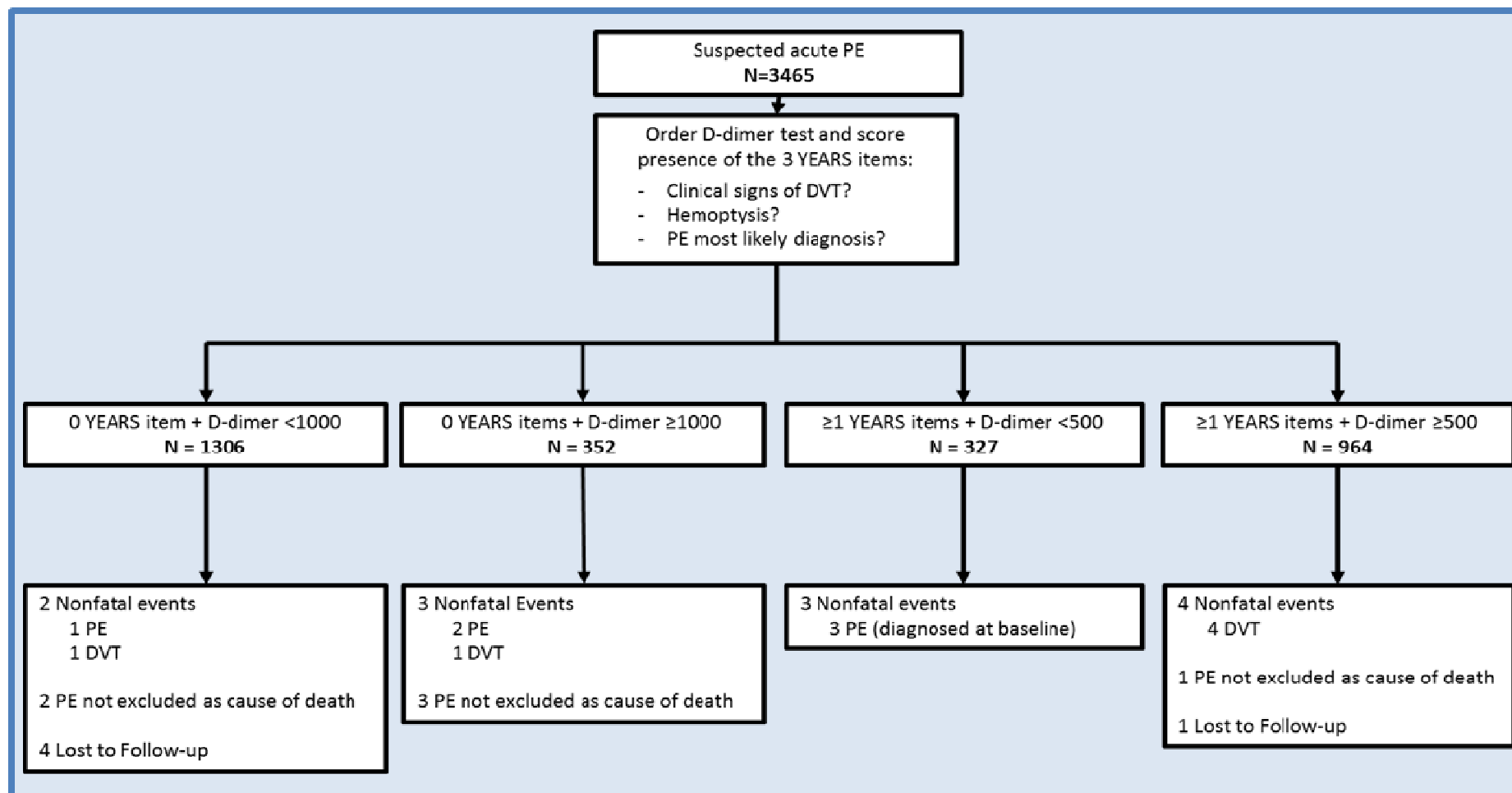
The YEARS algorithm

- **Simultaneous assessment:**
 - D-dimer test in all patients
 - Prediction rule of only 3 items of the original Wells rule, AND
- **Variable D-dimer thresholds depending on clinical probability**

The YEARS algorithm



Results



Results

Category	Total VTE (95%CI)	Fatal PE (95%CI)
Complete algorithm N=2944	0.61% 0.36-0.96	0.20% 0.07-0.44
Managed without CTPA N=1629	0.43% 0.17-0.88	0.12% 0.01-0.44
Managed with CTPA N=1315	0.84% 0.47-1.5	0.30% 0.12-0.78

Conclusions

- **The YEARS algorithm safely excludes PE**
- **Large reduction of CTPA**
 - 14%
 - Particularly relevant in younger (female) patients
- **Highly simplified algorithm**
 - Simultaneous assessment
 - Only 3 YEARS items
 - Simultaneous D-dimer test in all patients
- **Ready to be used in daily clinical practice**