SUPPLEMENTARY DATA FILE

Manuscript title: Geriatric screening, triage urgency and 30-day mortality in older

Emergency Department patients

Supplementary Table S1: The Acutely Presenting Older Patient screener

Supplementary Figure S1: Flowchart of study population

Supplementary Figure S2: Hospital admission by MTS category and APOP screening result

combined

Supplementary Figure S3: 7-day mortality by MTS category and APOP screening result

combined

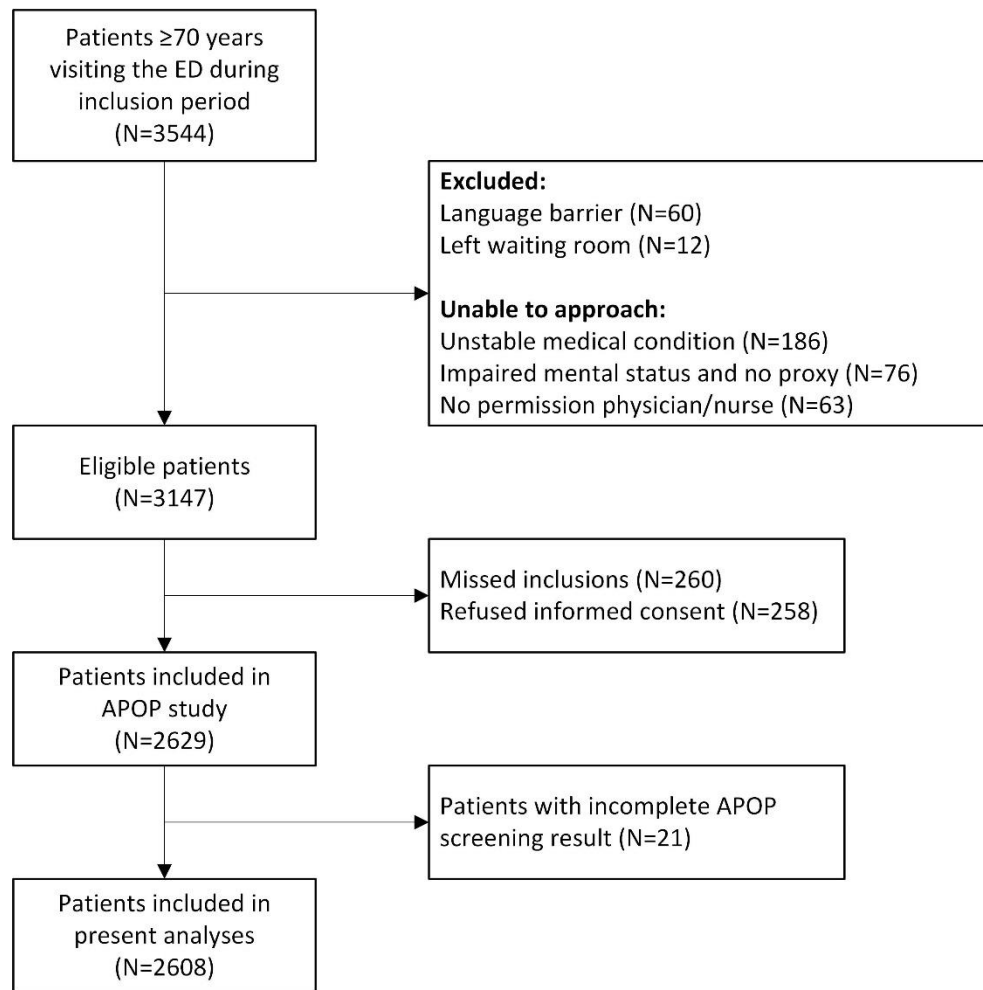**Supplementary Table S1.** The Acutely Presenting Older Patient screener

Predictors	Questions
Age (per 5 years increase)	1. What is the age of the patient?
Male	2. What is the gender of the patient?
Arrival by ambulance	3. Did the patient arrive by ambulance?
Need help prior to ED visit (IADL)	4. Before the illness or injury that brought you to the ED, did you need someone to help you on a regular basis? (like housekeeping, preparing meals)
Need help bathing or showering	5. Before the illness or injury that brought you to the ED, did you need assistance in bathing or showering?
Hospitalized past six months	6. Have you been hospitalized during the past six months?
Impaired cognition	7. Are you diagnosed with dementia?
	8. What year is it now?
	9. Say the months in reversed order

Abbreviations: ED = emergency department, IADL = instrumental activities of daily living. The first three questions of the screener are filled out by the triage nurse; the remaining questions are asked to the patient. If the patient is diagnosed with dementia (question seven) or if the patient incorrectly answers question eight or nine, cognition is considered to be impaired.

Prediction model: $1/(1+\exp(-(-5.848 + 0.262$ x '(age/5)' + -0.072 x 'male' + 0.460 x 'arrival by ambulance' + 0.534 x 'need help prior to ED visit' + 0.567 x 'need help bathing or showering' + 0.432 x 'hospitalized past six months' + 0.255 x 'impaired cognition')))

Application: http://screener.apop.eu/
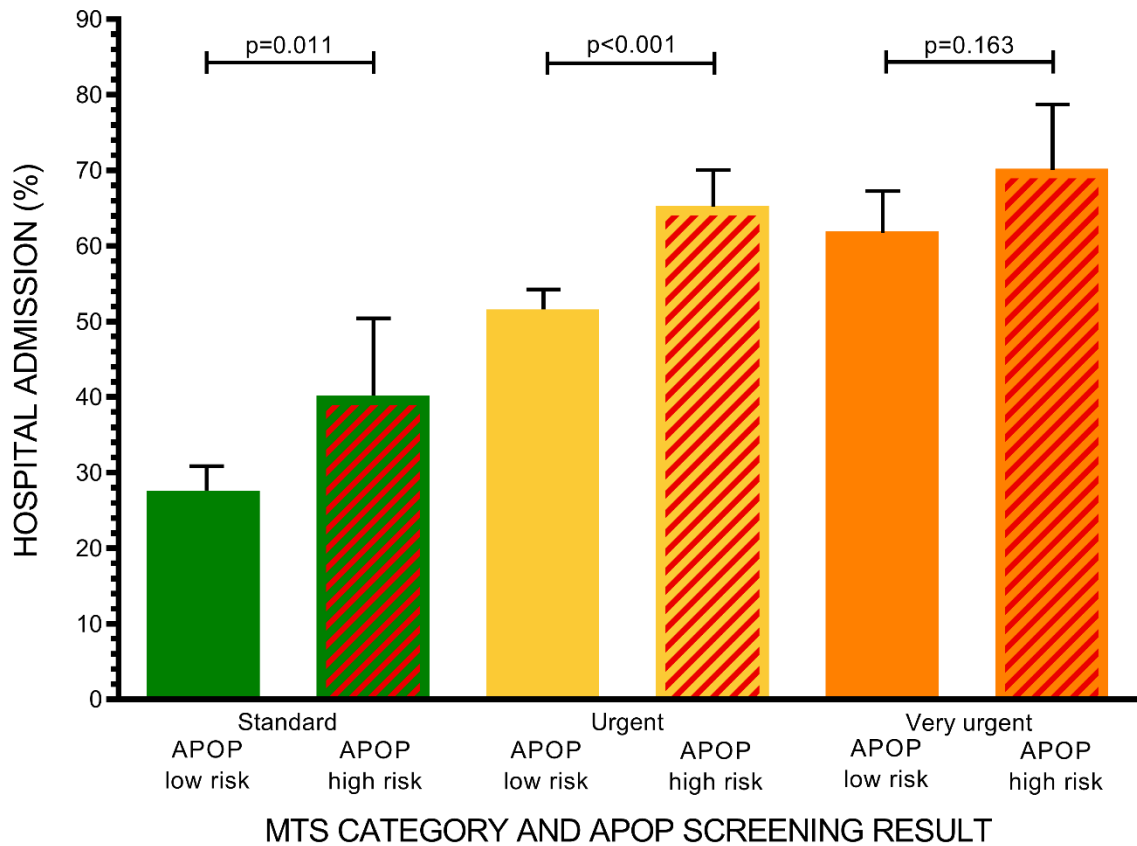
Supplementary Figure S1: Flowchart of study population

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┌─────────────────────┐
│ Patients ≥70 years  │
│ visiting the ED     │
│ during inclusion    │         ┌──────────────────────────────────────────┐
│ period (N=3544)     │         │ **Excluded:**                              │
└─────────────────────┘         │ Language barrier (N=60)                    │
           │                    │ Left waiting room (N=12)                   │
           │──────────────────► │                                            │
           │                    │ **Unable to approach:**                    │
           │                    │ Unstable medical condition (N=186)         │
           │                    │ Impaired mental status and no proxy (N=76) │
           ▼                    │ No permission physician/nurse (N=63)       │
┌─────────────────────┐         └──────────────────────────────────────────┘
│ Eligible patients   │
│ (N=3147)            │         ┌──────────────────────────────────────────┐
└─────────────────────┘         │ Missed inclusions (N=260)                  │
           │──────────────────► │ Refused informed consent (N=258)           │
           ▼                    └──────────────────────────────────────────┘
┌─────────────────────┐
│ Patients included   │
│ in APOP study       │         ┌──────────────────────────────────────────┐
│ (N=2629)            │         │ Patients with incomplete APOP              │
└─────────────────────┘ ──────► │ screening result (N=21)                    │
           │                    └──────────────────────────────────────────┘
           ▼
┌─────────────────────┐
│ Patients included   │
│ in present analyses │
│ (N=2608)            │
└─────────────────────┘
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The total study population of the APOP study was included, minus 21 patients with an incomplete APOP screening result.

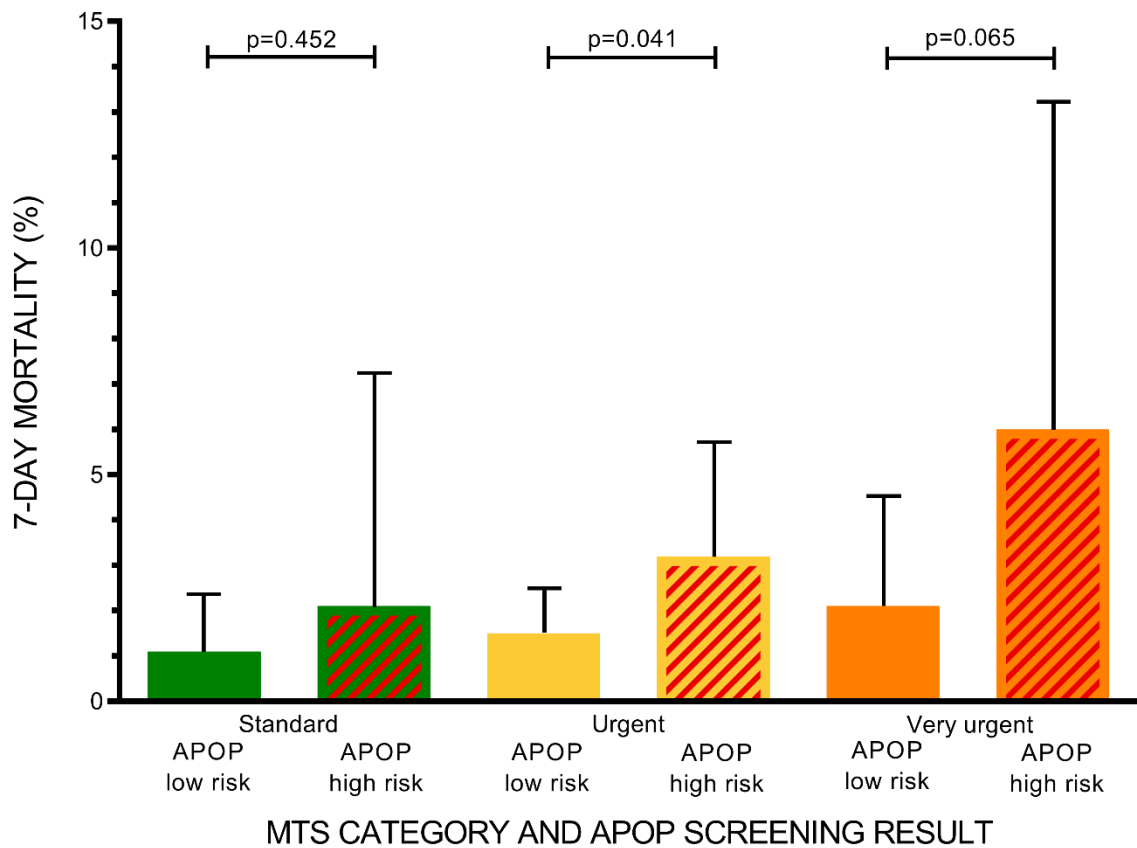**Supplementary Figure S2:** Hospital admission by MTS category and APOP screening result combined

	Standard APOP low risk	Standard APOP high risk	Urgent APOP low risk	Urgent APOP high risk	Very urgent APOP low risk	Very urgent APOP high risk
N (total)	613	97	1185	340	289	84
N (admitted)	169	39	612	222	179	59

Hospital admission rate for patients stratified by MTS category and APOP screening result combined. The upper 95% confidence intervals for proportion are shown. Nagelkerke R^2 was calculated for MTS alone ($R^2=0.083$), APOP alone ($R^2=0.020$) and MTS and APOP combined ($R^2=0.096$).

Supplementary Figure S3: 7-day mortality by MTS category and APOP screening result combined

15 —

p=0.452   p=0.041   p=0.065

7-DAY MORTALITY (%)

10 —

5 —

0 —

	Standard		Urgent		Very urgent	
	APOP low risk	APOP high risk	APOP low risk	APOP high risk	APOP low risk	APOP high risk

MTS CATEGORY AND APOP SCREENING RESULT

N (total)	613	97	1185	340	289	84
N (deceased)	7	2	18	11	6	5

7-day mortality percentages for patients stratified by MTS category and APOP screening result combined. The upper 95% confidence intervals for proportion are shown. Nagelkerke R^2 was calculated for MTS alone ($R^2=0.008$), APOP alone ($R^2=0.017$) and MTS and APOP combined ($R^2=0.019$).