The AAV-PRO correlates with quality of life measures and adds to the assessment of Australian ANCA-associated vasculitis outpatients

Dr Ajinkya Bhonsle[1], A/Prof Jessica Ryan[1], Mrs Paula Bussa[1], Dr Melissa Northcott[2], Prof Kevan Polkinghorne[1,3], Prof A. Richard Kitching[1,3]

[1]Department of Nephrology, Monash Health, Clayton, Melbourne, Australia
[2]Department of Rheumatology, Monash Health, Clayton, Melbourne, Australia
[3]Department of Medicine, Monash University, Clayton, Melbourne, Australia

Aim/Background

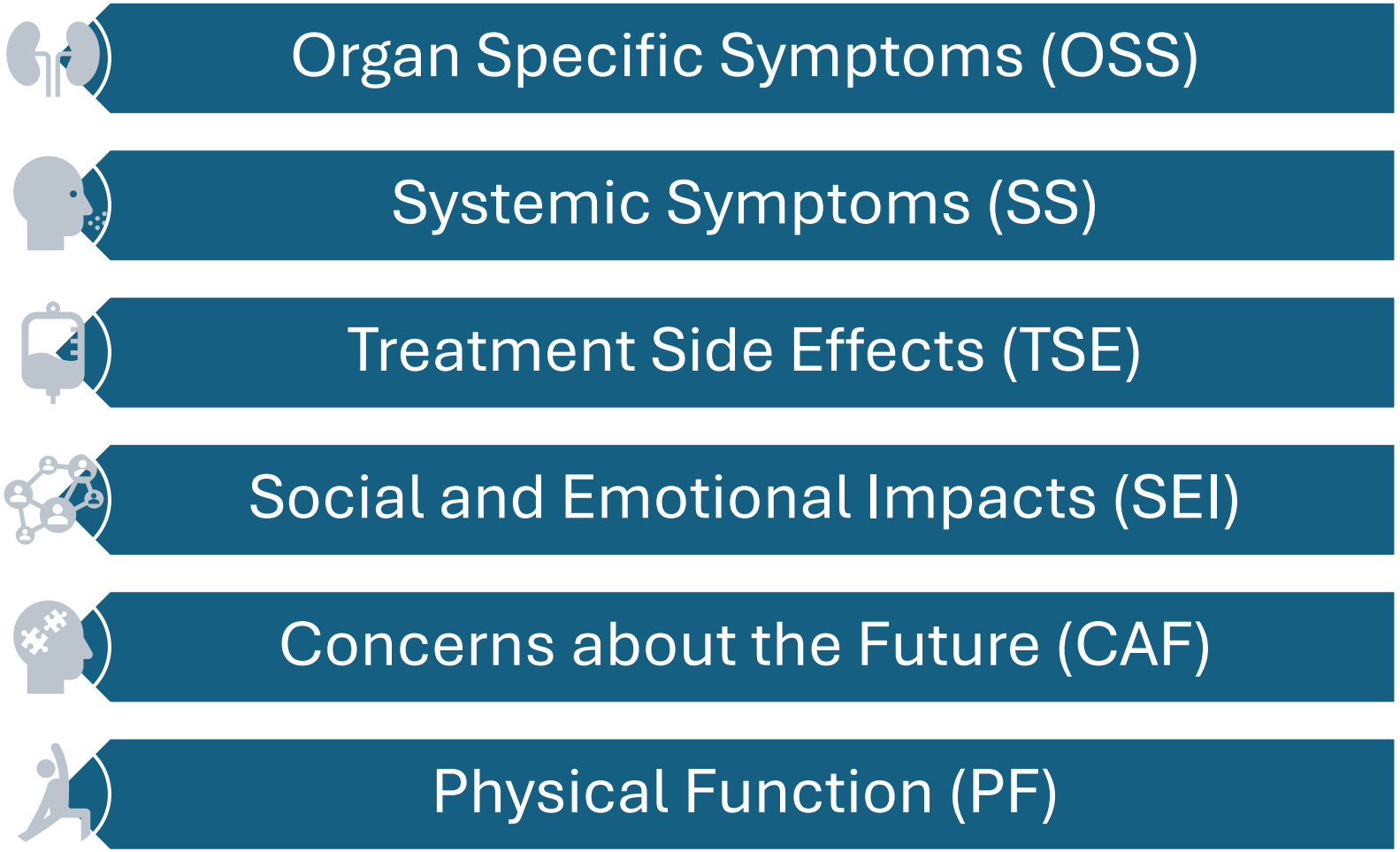
- ANCA Associated Vasculitis is a systemic inflammatory disease that affects patients quality of life

- AAV-PRO is a disease specific patient reported outcome tool consisting of six domains

- Aim: Assess relationship between AAV-PRO with clinical measures and other quality of life measures within an Australian cohort

AAV-PRO

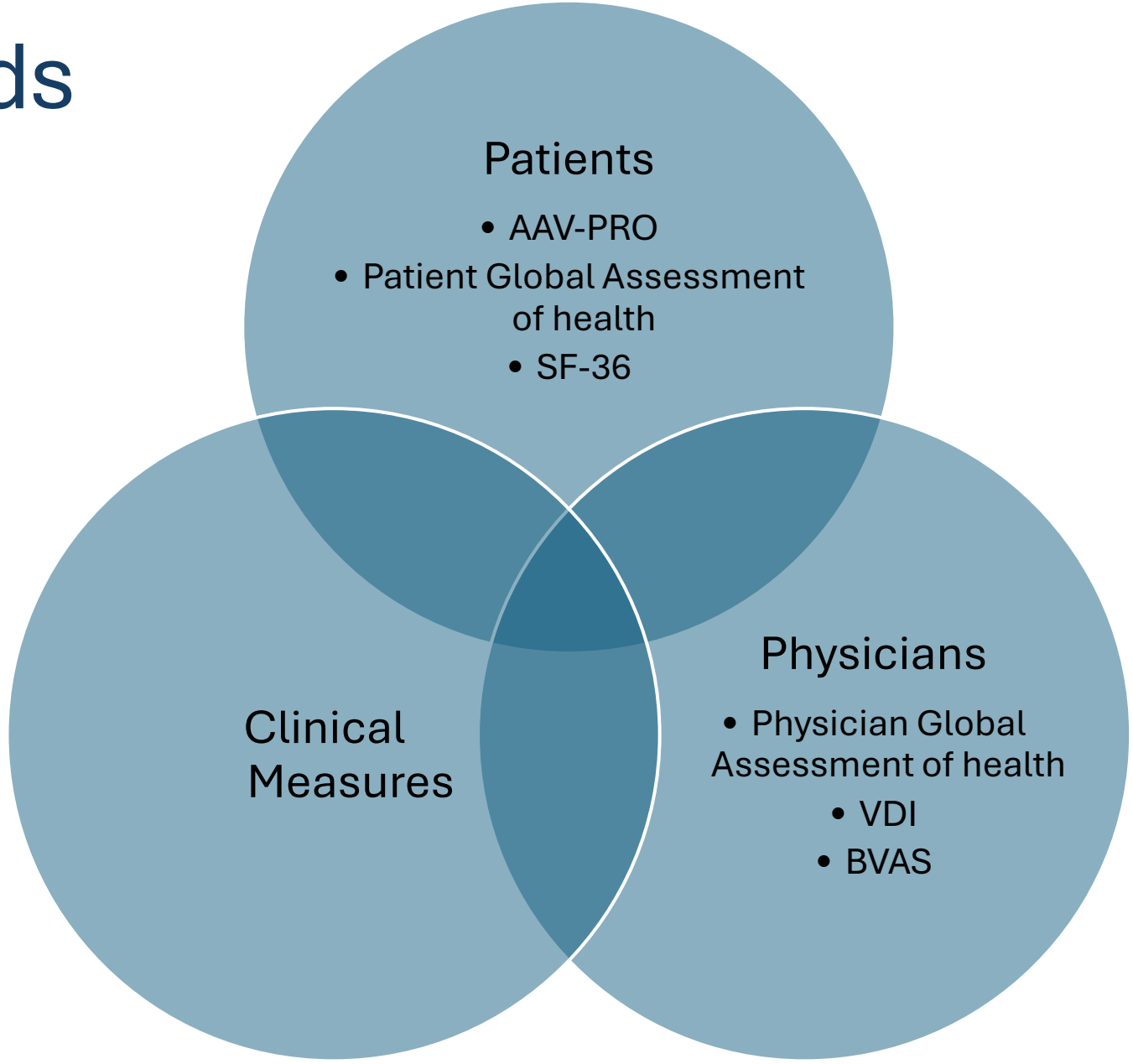
- 29 item questionnaire developed for people with AAV
- 6 domains (0-100 higher is worse)



Methods

- Prospective observational study (2021-2023)
- Inclusion Criteria: Diagnosis of GPA, MPA or EGPA in patients seen face to face at the Monash Vasculitis Clinic
- Exclusion Criteria: Inability to speak or read English, lack of capacity to provide informed consent or inability to complete the AAV-PRO questionnaire

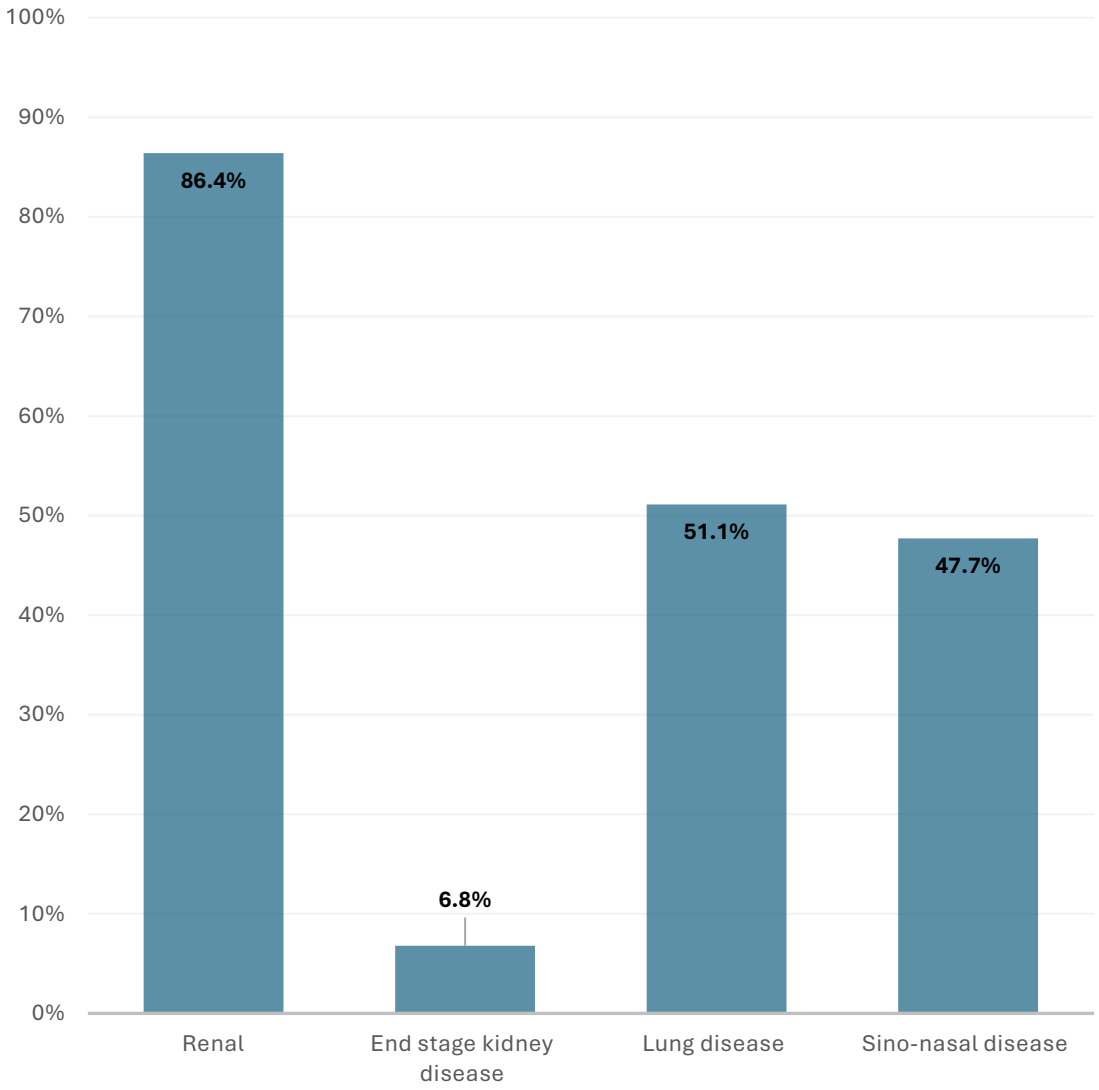
Methods


Patients
• AAV-PRO
• Patient Global Assessment of health
• SF-36
Clinical Measures
Physicians
• Physician Global Assessment of health
• VDI
• BVAS

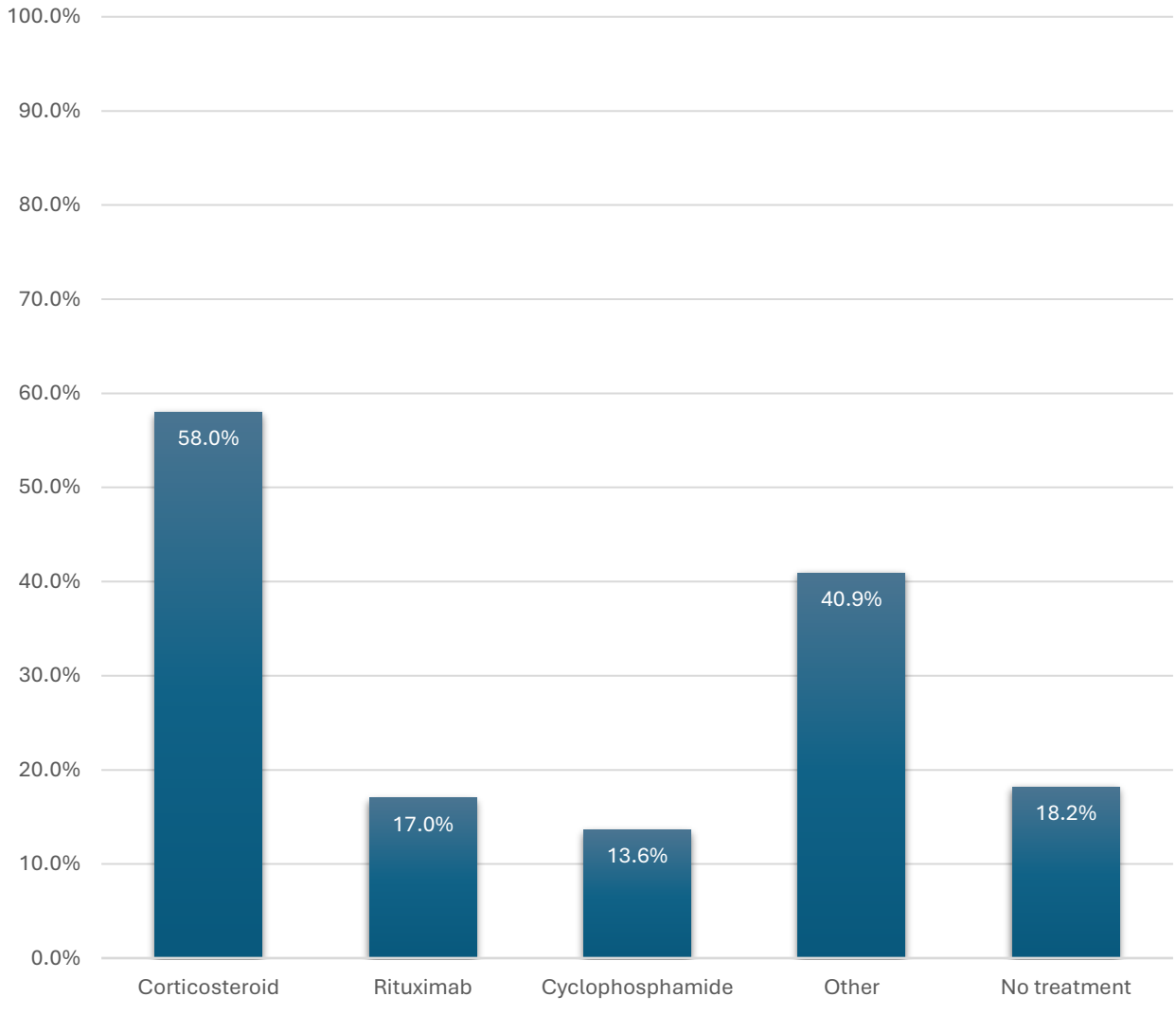
Characteristics

Characteristics	Value
Age, mean (SD)	61 (17.0)
Female, sex, n (%)	45 (51.1%)
Median years since diagnosis, (SD)	4 (7)
ANCA type, n (%)	
MPO-ANCA	49 (55.7%)
PR3-ANCA	35 (39.8%)
MPO-ANCA and PR3-ANCA	1 (1.1%)
ANCA-negative	3 (3.4%)

Organ Involvement



Immunosuppression



Results: AAV-PRO Domain Scores

AAV-PRO Domain	Mean (SD)
Organ Specific Symptoms	28.0 (21.2)
Systemic Symptoms	36.0 (23.0)
Treatment side effects	28.0 (19.4)
Social and Emotional Impacts	27.0 (22.6)
Concerns about the Future	32.9 (23.1)
Physical Function	22.9 (24.2)

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The AAV-PRO Correlates well with SF-36

	SF-36 Domains								
AAV-PRO Domain	Physical Function	Role FN Physical	Role FN Emotional	Energy/ Fatigue	Emotional Wellbeing	Social Functioning	Pain	General Health	PtGA of health
Organ Specific Symptoms	-0.467	-0.314	-0.300	-0.264	-0.381	-0.418	-0.441	-0.319	-0.361
Systemic Symptoms	-0.524	-0.562	-0.358	-0.555	-0.403	-0.574	-0.686	-0.571	-0.613
Treatment Side Effects	-0.623	-0.529	-0.445	-0.542	-0.479	-0.640	-0.615	-0.599	-0.564
Social and Emotional Impact	-0.579	-0.597	-0.532	-0.506	-0.563	-0.666	-0.655	-0.530	-0.561
Concerns about the Future	-0.571	-0.630	-0.529	-0.456	-0.426	-0.619	-0.618	-0.516	-0.548
Physical Function	-0.800	-0.620	-0.453	-0.550	-0.370	-0.632	-0.551	-0.547	-0.648

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All parameters statistically significant with p value < 0.05

AAV-PRO: Correlation with other clinical indices

AAV-PRO Domain	PhGA of health	BVAS	eGFR	Years since Dx	VDI
Organ Specific Symptoms	-0.150 p=0.16	0.151 p=0.16	0.099 p=0.37	0.200 p=0.06	0.096 p=0.40
Systemic Symptoms	-0.376 p<0.01	0.190 p=0.08	-0.098 p=0.37	-0.016 p=0.88	0.113 p=0.33
Treatment Side Effects	-0.376 p<0.01	0.204 p=0.06	-0.050 p=0.65	-0.196 p=0.07	0.113 p=0.32
Social and Emotional Impact	-0.465 p<0.01	0.179 p=0.10	-0.032 p=0.77	-0.164 p=0.13	0.209 p=0.07
Concerns about the Future	-0.453 p<0.01	0.169 p=0.12	-0.111 p=0.31	-0.283 p=0.01	0.179 p=0.12
Physical Function	-0.529 p<0.01	0.273 p=0.01	-0.298 p=0.05	-0.303 p<0.01	0.373 p<0.01

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Results: Subgroup Insights

- PR3-ANCA subtype
  - ↑ Treatment Side Effects
  - ↑ Concerns About the Future
- Active disease
  - Higher Physical Function scores = worse physical function
- People over 65
  - ↑ Treatment Side Effects
  - ↑ Concerns About the Future

Limitations

- Single-centre cohort
- Sample size limits power
- Cross sectional and not longitudinal

Conclusions

1. AAV-PRO correlates with other established quality of life measures in an Australian cohort

2. AAV-PRO captures elements of disease burden not caught by physician derived measures

3. The Physical Function domain is most clinically sensitive

- Future Research: Longitudinal studies, use of the ANZVASC registry for multi-centre data and effect of new agents such as Avacopan on AAV-PRO.

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