Data Extraction Form

Reviewer:

First author:

Year of publication:

1. Study Design

What is the study design?

        ☐   Case control

        ☐   Cohort

                ☐   Prospective

                ☐   Retrospective

        ☐   Other: _____

Is the study single-centred or multi-centred?

        ☐   Single-centred

        ☐   Multi-centred

What is the total number of participants?

        N = _____ participants

Are the methods for recruitment and sampling clearly stated?

        ☐   Yes

        ☐   No

     If so, how were patients recruited?

_____
_____

Was ethical approval stated? _____

What were the inclusion and exclusion criteria for participants? (AVF patients)

     Inclusion criteria: _____

_____
_____

Exclusion
criteria:_____

_____
_____

What was the AV fistula outcome being assessed?

☐   AV fistula failure

☐   Primary AV fistula failure

☐   AV fistula dysfunction

☐   AV fistula thrombosis

☐   Other: _____

Was a definition of a working provided?

☐   No

☐   Yes
     State: _____

How was this outcome diagnosed? (can tick more than one box)

☐   Clinical signs (i.e. inspection, palpation, auscultation)

☐   Dialysis failure

☐   Ultrasonography

☐   Angiogram/ fistulogram

☐   Unclear

☐   Other: _____

State the timing of blood collection:

☐   At AV fistula construction (i.e. peri-operative)

☐   At AV fistula failure

☐   At specified follow-up time. State _____

☐   Unclear

☐   Other. State_____

In brief, state the laboratory methods for quantifying biomarkers:

_____

_____

2a. Case control analysis

State the number of cases and controls.

Cases = _____ Definition:_____

Controls = _____
Definition:_____

Is the case group further divided into subgroups?

☐ Yes, state subgroups and number: _____

☐ No

Were cases and controls matched for confounding factors?

☐ Yes,

☐ No

☐ Prospective study (cases & controls derived from common baseline population)

If so, list matched confounding factors (e.g. age, gender): _____

_____

2b. Cohort studies

At baseline, did patients have any history of vascular access failure?

☐ Yes, describe: _____

☐ No, newly constructed fistula

☐ Unclear

What was the number of patients recruited? _____

What was the follow up time? _____

How many patients were lost to follow up? _____

What was the final number of participants analysed?

Cases: _____ Controls: _____

4. Statistical Analyses

What statistical analyses were employed?

☐ Comparative analyses

    ☐ Qualitative

        ☐ χ^2 (chi squared) test

        ☐ Fisher's

    ☐ Quantitative

        ☐ Mann-Whitney U (non-parametric)

        ☐ Student's t test (parametric)

    ☐ Odds ratio

☐ Predictive analyses

    ☐ Hazards ratio

    ☐ Kaplan-Meier survival curve

    ☐ Log rank test

☐ Other:_____

_____

Was the statistical significance set at $p < 0.05$?

    ☐ Yes

    ☐ No;
    State cut-off: _____

    Give reasons:

    _____

Were multivariate analyses performed?

    ☐ No

    ☐ Yes

    State any confounding factors that have been adjusted for:

_____

_____

_____

_____

3. Population Characteristics

State available population characteristics data for cases and controls (preferred) OR combined population. List any additional important characteristic data in blank rows.

Item	Units	Cases	Controls	Combined Population
% Males				
Age				
Smoking				
Hypertension				
Hypertension				
Dyslipidaemia				
BMI				
Radiocephalic: brachiocephalic				
Kt/v				
Duration of CRF				
Duration of HD				
Previous vascular access failure				

BMI, body mass index; CRF, chronic renal failure; HD, haemodialysis

State available medication data for cases and controls (preferred) OR combined population.

Medications	Dose	Cases	Controls	Combined Population
Anticoagulants				
Lipid altering medications				
Anti-hypertensives				

Oral hypoglycaemics				
Anti-inflammatory agents				
Other: _____				

4. Biomarkers Assessed

List all biomarkers that were assessed in relation to AV fistula outcome, and state the statistical analysis applied (e.g. survival curve, multivariate HR, univariate HR, OR, raw conc.)

Biomarker	Statistical model(s) applied

5. Results

Record details for survival curves/ log rank test:

Biomarker	Units	Cut-off 1	Cut-off 2	Cut-off 3	Cut-off 4	Cut-off 5	P value (log rank)

Record any hazards ratios, risk ratios or odds ratios stated for each biomarker. Record with the ratio is univariate or multivariate analysis

Biomarker	OR/HR/RR	95 % CI	P value	Univariate/ multivariate

More?	□ (record on additional data extraction forms)			

Record biomarker concentrations in case and control groups:

Biomarker	Units	Cases	Controls	P value

Record any additional results that support the association between circulating biomarker levels and AV fistula dysfunction.

_____
_____
_____
_____
_____
_____
_____
_____
_____
_____
_____
_____

7. Discussion and Conclusion

What conclusions were drawn from this study?

_____
_____
_____
_____
_____

List limitations of the study identified by the author:

_____
_____
_____
_____
_____

_____

_____

List any other limitations not stated by the author:

_____

_____

_____

_____