

Ascend Clinical offers a variety of adequacy panels in LabCheck.

HEMODIALYSIS

Kt/V Jindal (Not K/DOQI Recommended)	<ul style="list-style-type: none"> Jindal calculation Does not require draw information Includes Pre BUN, Post BUN, URR and Kt/V Jindal
Kt/V Natural Log, URR	<ul style="list-style-type: none"> Daugirdas II calculation Requires the following draw information (pre-weight, post-weight, treatment time) Includes Pre BUN, Post BUN, URR and Kt/V Natural Log
Kt/V Natural Log, URR, nPNA (3x/wk)	<ul style="list-style-type: none"> Daugirdas and Depner calculations Requires the following draw information (pre-weight, post-weight, treatment time, treatment number for nPNA calculation) Includes Pre BUN, Post BUN, URR, Kt/V Natural Log and nPNA nPNA calculated from Kt/V <u>without</u> formal kinetic modeling by Depner and Daugirdas using thrice weekly dialysis
Kt/V Standard, Natural Log, URR	<ul style="list-style-type: none"> Leypoldt and Daugirdas II calculations Requires the following draw information (pre-weight, post-weight, treatment time, number of treatments per week) Includes Pre BUN, Post BUN, URR, Kt/V Standard and Kt/V Natural Log CMS requirement for patients dialyzing 2 or 4-6 times per week (Measures Assessment Tool)
Kt/V Standard, URR (<3x/wk)	<ul style="list-style-type: none"> Leypoldt calculation only Requires the following draw information (pre-weight, post-weight, treatment time, number of treatments per week) Includes Pre BUN, Post BUN, URR and Kt/V Standard CMS requirement for patients dialyzing 2 or 4-6 times per week (Measures Assessment Tool)

PERITONEAL DIALYSIS

PD Adequacy No Urine	<ul style="list-style-type: none"> Volume of Distribution (V): Hume and Weyers for Adult; Friis-Hansen for Peds <16 years Body Surface Area (BSA): Dubois and Dubois for Adult; Haycock for Peds <16 years Protein Nitrogen Appearance (PNA): Bergstrom Requires draw information (dry weight, height, 24-hr total drain volume) Includes Blood BUN, Blood Creatinine, Fluid Glucose, Fluid Urea Nitrogen, Fluid Creatinine, Weekly Dialysate Kt/V, Weekly Dialysate CrCl, nPNA
PD Adequacy With Urine	<ul style="list-style-type: none"> Volume of Distribution (V): Hume and Weyers for Adult; Friis-Hansen for Peds <16 years Body Surface Area (BSA): Dubois and Dubois for Adult; Haycock for Peds <16 years Protein Nitrogen Appearance (PNA): Bergstrom Requires the following draw information (dry weight, height, total urine collection time, urine volume, 24-hr total drain volume) Includes Blood BUN, Blood Creatinine, Fluid Glucose, Fluid Urea Nitrogen, Fluid Creatinine, Urine Urea Nitrogen, Urine Creatinine, Weekly Dialysate Kt/V, Weekly Residual Kt/V, Weekly Total Kt/V, Weekly Dialysate CrCl, Weekly Residual GFR, Weekly Total CrCl, Weekly Residual CrCl, and nPNA

FORMAL UREA KINETIC MODELING (UKM)

Formal Kinetic Modeling is also available in LabCheck for hemodialysis patients dialyzing 2-3 times per week. Per KDOQI, formal kinetic modeling provides a quantitative method for developing a treatment prescription for a specific patient. Formal UKM can be used to calculate the exact treatment time required to deliver a particular hemodialysis dose at specified blood and dialysate flows with a particular dialyzer.

RESOURCES

AJKD: [https://www.ajkd.org/article/S0272-6386\(15\)01019-7/fulltext](https://www.ajkd.org/article/S0272-6386(15)01019-7/fulltext)

CMS: <https://www.cms.gov/Medicare/Provider-Enrollment-and-Certification/GuidanceforLawsAndRegulations/Dialysis.html>

KDOQI: https://www.kidney.org/sites/default/files/docs/12-50-0210_jag_dcp_guidelines-hd_oct06_sectiona_ofc.pdf