

INTRODUCING **THERANOVA** FOR EXPANDED HEMODIALYSIS [HDx]

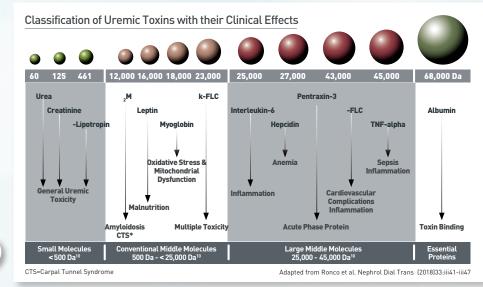


#### **THE PROBLEM**

## CONVENTIONAL/LARGE MIDDLE MOLECULAR UREMIC TOXINS **ACCUMULATE** IN KIDNEY FAILURE PATIENTS<sup>1,2</sup>

Conventional/large middle-molecules are linked to chronic inflammation, cardiovascular disease (CVD), secondary immunodeficiency, erythropoietin resistance, symptom burden and other dialysis related comorbidities.<sup>1-4</sup>

Accumulation of these uremic toxins result in **elevated concentrations** in patients with Kidney Failure (KF), and may cause **adverse biologic effects.**<sup>1</sup>





~ 50% of patients
with KF die from CVD8

Traditional high-flux membranes have **limited ability** to remove conventional and large middle molecular uremic toxins (up to 45,000 Da). 1.4-6

## ACCUMULATION OF CONVENTIONAL/LARGE MIDDLE MOLECULES MAY CONTRIBUTE TO **DISEASE BURDEN** IN KIDNEY FAILURE PATIENTS<sup>1,2</sup>

In a National Kidney Foundation (NKF) online survey, majority of patients (n=359) receiving in-center hemodialysis reported experiencing **interdialytic symptoms**:<sup>9</sup>

62% of patients
feel fatigued/washed out

40% of patients
report 4+ hours of recovery time

6 % of patients skipped a dialysis session

These QoL symptoms were severe and correlated with longer recovery time following hemodialysis, as well as shortened and skipped hemodialysis sessions.

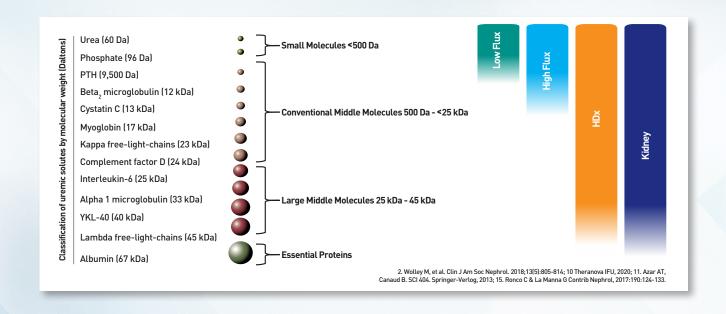
#### THE SOLUTION

albumin levels. 1,4-6,10

The Theranova MCO membrane's unique design includes a tight pore size distribution, with increased nominal pore size and pore density that delivers a steep sieving curve resulting in higher permeability for uremic toxins (up to 45,000 Da), while selectively retaining endotoxins/essential proteins and maintaining stable

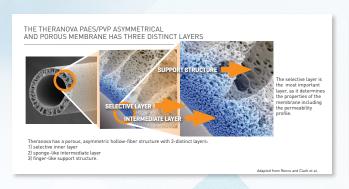
The minimized diameter (180 microns) of the **Theranova** membrane **enhances internal filtration** expanding solute removal, creating a stable separation profile and **selectivity** throughout treatment.<sup>10</sup>

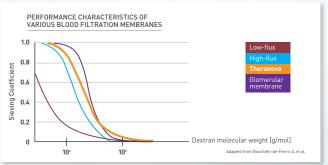
## HDx ENABLED BY THERANOVA: ONE STEP CLOSER TO THE NATURAL KIDNEY



#### THERANOVA 4 KEY DIFFERENTIATORS

Higher Permeability
 Selectivity
 Retention
 Enhanced Internal Filtration



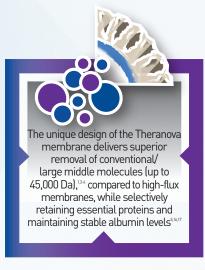


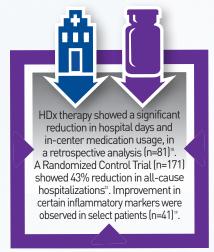
### HDx ENABLED BY THERANOVA: NOW IS THE TIME TO CHANGE EVERYTHING

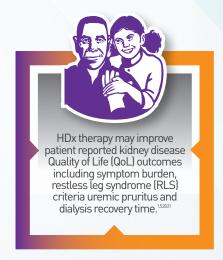


#### **CHANGE ONE THING.**

Theranova, the next evolution in hemodialysis (HD) brings us a step closer to the natural kidney by expanding clearance of conventional/large middle molecules (up to 45,000 Da) linked to inflammation and CVD, compared to traditional HD.<sup>1,4-6,10</sup>







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#### **CHANGE EVERYTHING.**

Simply change the dialyzer membrane to expand clearance and CHANGE EVERYTHING for your patients'.



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The **Theranova** Dialyzer is indicated for patients with chronic kidney failure who are prescribed intermittent hemodialysis. It provides an expanded solute removal profile with increased removal of various middle and large molecules (up to 45 kDa) that may play a pathologic role in the uremic clinical syndrome. The **Theranova** Dialyzer is not intended for hemofiltration or hemodiafiltration therapy. The total extracorporeal blood volume for the **Theranova** Dialyzer and the set should represent less than 10% of the patient's blood volume.

For Single Use Only

Rx Only. For safe and proper use of these devices refer to the Instructions for Use.

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