natera™ | Prospera™ Transplant assessment

Meet Mike

Regular Prospera testing helps minimize the risk of Mike's unique clinical factors leading to transplant rejection

Clinical Factors that May Indicate Risk for Transplant Rejection	Donor-specific alloantibody (DSA) detected	History of rejection	Non-adherence to anti-rejection medication	High Calculated Panel Reactive Antibody (cPRA)	Delayed Graft Function (DGF) occurrence	Decreased immune suppression due to infection and/or adverse effects	Geographic distance or access to transplant center
Factors Covered in Mike's Case Example	✓			✓	✓	✓	

Mike's Patient Profile

AGE	61
RACE	Caucasian
LOCATION	Henderson, Nevada, close to a large transplant center
CLINICAL NOTES	• End-Stage Renal Disease (ESRD) due to diabetes associated with hypertension, obesity (BMI 33) and non-obstructive coronary artery disease (CAD) • cPRA was 98% • No DSA detected pre-transplant • Transplant: July 2020 from a deceased donor renal transplant (DDRT) with kidney donor profile index (KDPI) of 70% • Transplant was complicated by **DGF**, hemodialysis on post-operative days # 1, 3, 8, 11, 14, 18 • On post-operative day #17, due to prolonged DGF, biopsy was negative for rejection, but **acute tubular injury** with isometric vacuolization (**possible calcineurin inhibitor (CNI) toxicity**), moderate arteriosclerosis (donor derived), C4d negative, interstitial fibrosis and tubular atrophy (IFTA) 5% • On post-operative day #18, **Prospera result was 0.29%** • Tacrolimus dose reduced after biopsy (trough was 11.5 prior to biopsy)
RECENT VISIT	• August 2020 - CNI trough was 7.5. **Serum creatinine (Cr) was 3 mg/dL** and **Prospera of 0.73%** on 8/12/20 • September 2020 - **Cr was 1.4 mg/dL** • November 2020 - **Cr ranged from 1.4 to 1.6 mg/dL** and **Prospera 1.94%** • March 2021 - **Cr was 2 mg/dL** and **Prospera was 2.34%** early in the month which prompted a biopsy; **Cr. was 1.71 mg/dL** late in the month • April 2021 - **Cr. was 1.8 mg/dL**; biopsy showed **grade 1A T-cell mediated rejection** (Banff 2019 classification), moderate glomerulitis, severe peritubular capillaritis, and mild transplant glomerulopathy by electron microscopy only, IFTA (20%), mild arteriosclerosis. C4d is negative by immunofluorescence. C12 2950 MFI DSA positive • Acute cellular rejection was treated with solumedrol pulse; new DSA treated with IVIG x 2 and rituximab • April 2021 - **Cr was down to 1.5 mg/dL** at end of the month

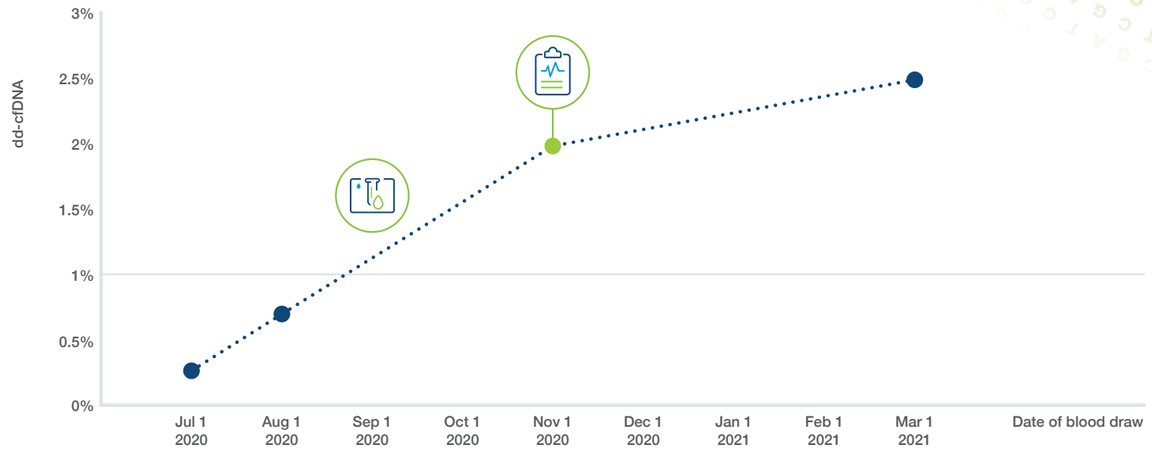
Treatment Plan with Prospera

Monthly assessments with Prospera to determine if results are within range of previously established baseline.

March 2021 Prospera result and increasing Cr prompted biopsy which led to changes in medication.

Impact of Prospera Surveillance

Mike's physician used the Prospera result each month to assess if treatment was working.



Creatinine is a lagging indicator of rejection—this patient's creatinine was **stable at 1.4 - 1.6 mg/dL**, yet the **Prospera rose above 1%**.

Performing a biopsy when the Prospera rose above 1% at four months post-transplant may have detected rejection earlier.

KEY TAKEAWAY

Monitoring kidney transplant recipients with Prospera may help identify subclinical rejection and allow for earlier treatment instead of relying on serum creatinine alone.

Prospera-powered monitoring for any transplant patient

Let's get started

Explore using Prospera for more frequently across a broader spectrum of patients through these options with Natera:

Request a clinical discussion between you and a local transplant nephrologist to hear why and how they have implemented surveillance monitoring with Prospera. Email **prospera@natera.com** to get connected.

Discuss potential surveillance options for your patient types with our clinical team to incorporate Prospera in your practice. Email **prospera@natera.com** to set up a clinical discussion.

Utilize the Natera physician portal to enable automatic scheduling of routine Prospera standing orders to certain patient cohorts. Reach out to your **Natera Sales Representative** for a demo.

View videos of other phsyicians and their stories about Prospera:
Visit us **natera.com/prospera-for-any-type**

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