



Prospera™
Transplant assessment

The background of the slide features a dark blue field. On the left, there are two stylized, glowing blue kidneys. To their right, a green DNA double helix is depicted, with several circular nodes connected by lines, suggesting a molecular or genetic structure. The overall aesthetic is scientific and high-tech.

Introducing Prospera™ with Quantification

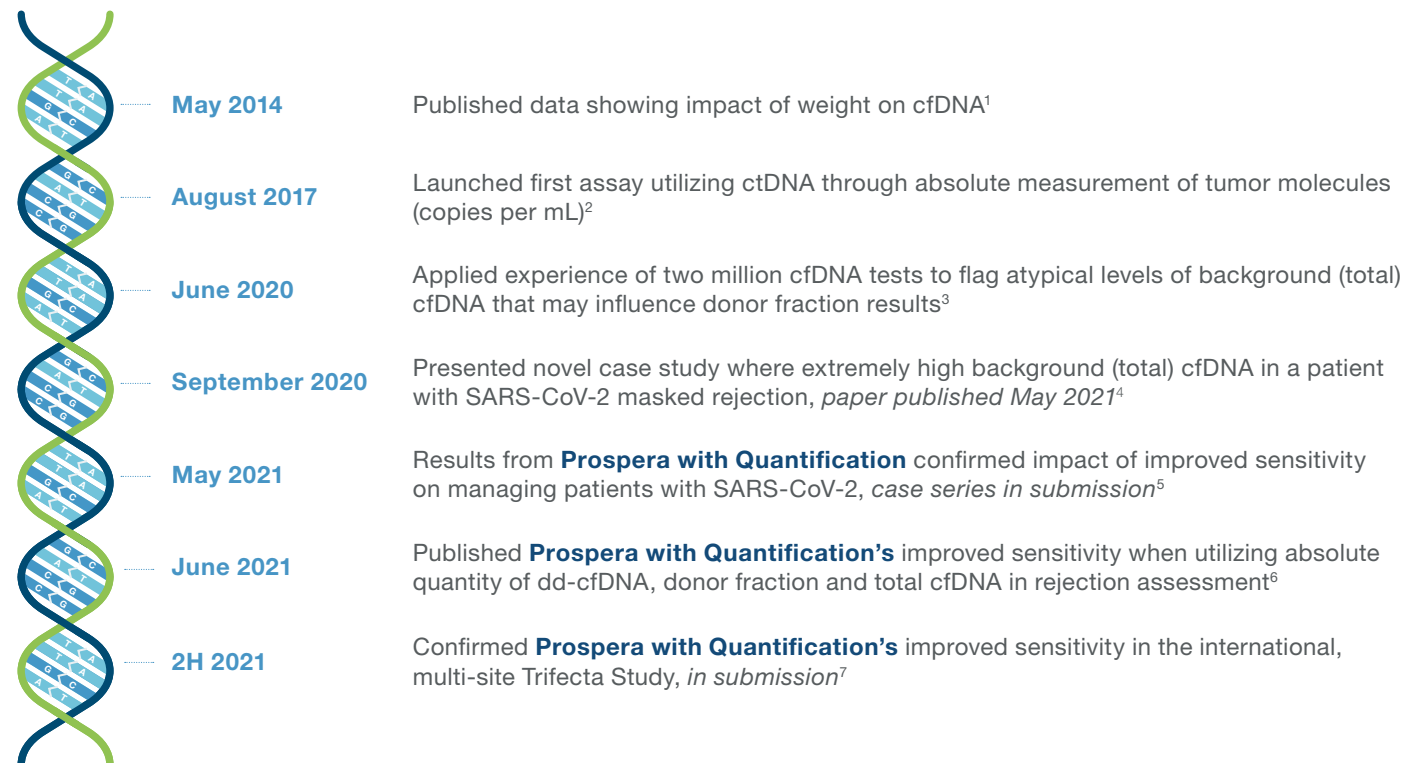
More than just a fraction

Natera's Prospera™ transplant assessment test is powered by proprietary cfDNA technology, optimized over three million tests. Typical cell-free DNA tests for rejection only report the fraction of donor-derived cell-free DNA (dd-cfDNA) to identify active rejection.

Now, only Prospera with Quantification provides **the *absolute quantity* of dd-cfDNA along with dd-cfDNA *fraction* and *total cfDNA*** for improved sensitivity on every report.

Pioneers in measuring cfDNA

Applying our deep legacy to enable Prospera with Quantification



New data shows quantification improves sensitivity

Results from Bunnapradist et al highlight how Prospera with Quantification (quantity of dd-cfDNA, fraction of dd-cfDNA and total cfDNA) increased sensitivity to determine appropriate care.⁶

Original method with DD-cfDNA Fraction ⁶			Performance of Prospera with Quantification ⁶		
Overall Sensitivity	7 of 9	77.8%	Overall Sensitivity	9 of 9	>99%
Specificity	29 of 32	90.6%	Specificity	28 of 32	87.5%

More information for better clinical care

When the amount of total cfDNA is atypically high, it impacts the fraction of dd-cfDNA and may therefore compromise the result.³ Only Prospera with Quantification provides three values:

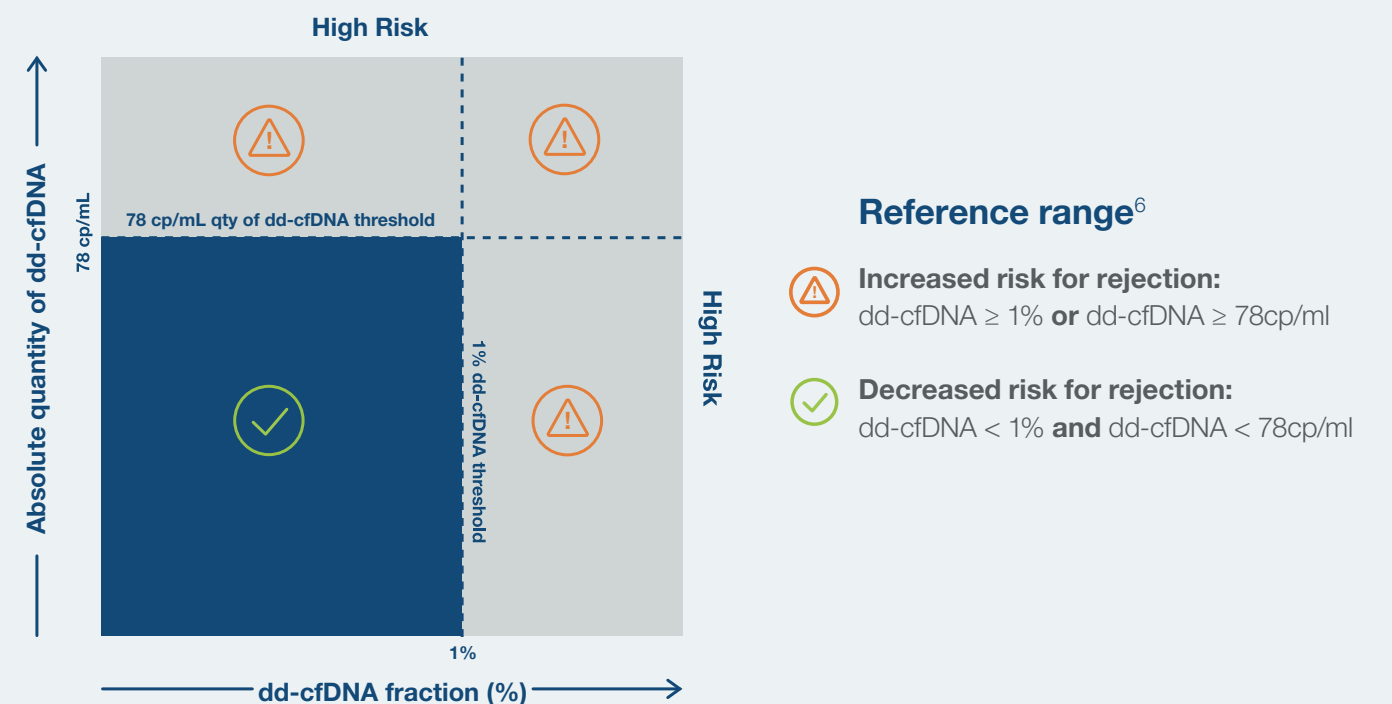
$$\frac{\text{Absolute quantity of dd-cfDNA (copies per mL)}}{\text{Total quantity of cfDNA (copies per mL)}} = \left(\% \text{ dd-cfDNA} \right)$$

The *absolute quantity of dd-cfDNA*⁶: the amount of dd-cfDNA in the sample

The *dd-cfDNA fraction*: the ratio of the absolute quantity of dd-cfDNA to total cfDNA

The *total cfDNA*: the amount of cfDNA, donor or recipient, found in the sample. Various factors that may influence total cfDNA include viremia, surgery, chemotherapy and more³

IMPLEMENTING VALUES INTO CLINICAL DECISIONS



Only report to give you more than just a fraction

ILLUSTRATIVE

PATIENT INFORMATION

Patient Name: Doe Jane
Date of birth: 01/01/1980
Patient ID: P99457
Medical Record #: LP1234567
Transplant Date: 06/07/2018
Collection Kit #: 123456-2-N
Accessioning ID: N/A
Case File ID: 101

TEST INFORMATION

Patient Name: Dr. Matthew Smith, M.D. (G123456)
Date of birth: 01/01/1980
Report Date: 08/06/2021
Transplanted organ: Kidney
Samples collected: 08/04/2021
Samples Received: 08/04/2021

Prospera™ Transplant assessment

Prospera assesses transplanted organ injury by reporting **donor-derived cell-free DNA (dd-cfDNA)** in a recipient's blood.

TEST RESULTS AND INTERPRETATION

dd-cfDNA %
0.7%

Percentage of dd-cfDNA in the sample

dd-cfDNA quantity
105 cp/ml

Absolute quantity of dd-cfDNA in the sample

Increased risk for rejection



Reference range

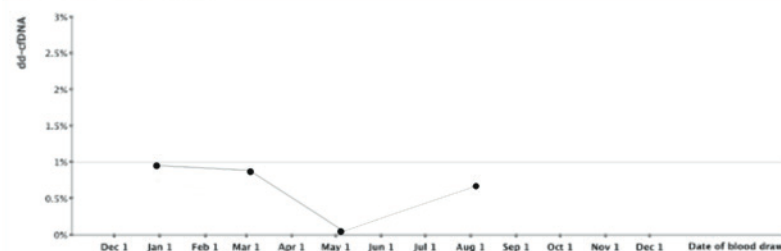
Increased risk for rejection:
dd-cfDNA ≥ 1% or dd-cfDNA ≥ 78 cp/ml

Decreased risk for rejection:
dd-cfDNA < 1% and dd-cfDNA < 78 cp/ml



Combining **quantity of dd-cfDNA** with **donor fraction** to help avoid false negative interpretations

PATIENT TESTS SUMMARY



Longitudinal view of **donor fraction** for your Prospera surveillance patients

Blood draw date	dd-cfDNA cp/ml	Total cfDNA cp/ml	dd-cfDNA%	dd-cfDNA change
12/30/2020	72 cp/ml	8000 cp/ml	0.90%	-
03/06/2021	79 cp/ml	9753 cp/ml	0.81%	-0.09%
05/06/2021	21 cp/ml	23333 cp/ml	0.09%	-0.72%
08/04/2021	105 cp/ml	15000 cp/ml	0.7%	-0.61%



Metrics such as **total cfDNA**, **donor fraction**, **absolute quantity of dd-cfDNA** and change in donor fraction to include in your care decisions

Call us at **650.273.4468** to speak to our clinical team

Learn more about the Prospera transplant assessment test at natera.com/prospera

REFERENCES

1. Dar P, Curnow KJ, Gross SJ, et al. Clinical experience and follow-up with large scale single -nucleotide polymorphism—based noninvasive prenatal aneuploidy testing. Am J Obstet Gynecol 2014;211:527.e1-17.
2. Tin A, Aleshin A, et al. Correlation of variant allele frequency and mean tumor molecules with tumor burden in patients with solid tumors. Poster presented at: American Association of Cancer Research (AACR); April 9-14, 2021; Virtual Meeting.
3. Gauthier P, Aleshin A, Shchegrova, et al. Factors Influencing Background cfDNA Levels: Implications for dd-cfDNA Assessment in Transplant Patients. Poster presented at: American Transplant Congress; May 30 – June 4, 2020; Virtual Meeting.
4. Bunnapradist, S, et al. Extremely High Cell-free DNA Levels Observed in Renal Allograft Patient With SARS-CoV-2 Infection, Transplantation Direct: May 2021 – Volume 7 – Issue 5 – p e691 doi: 10.1097/TXD.0000000000001145
5. Reusing J.O et al, Association between total cell free DNA and SARS-CoV-2 in Kidney Transplant Patients. In submission (2021)
6. Bunnapradist, S. Using both fraction and quantity of donor-derived cell-free DNA to detect kidney allograft rejection, J Amer Soc Nephrology 2021, in press
7. Natera internal data on file, 2021