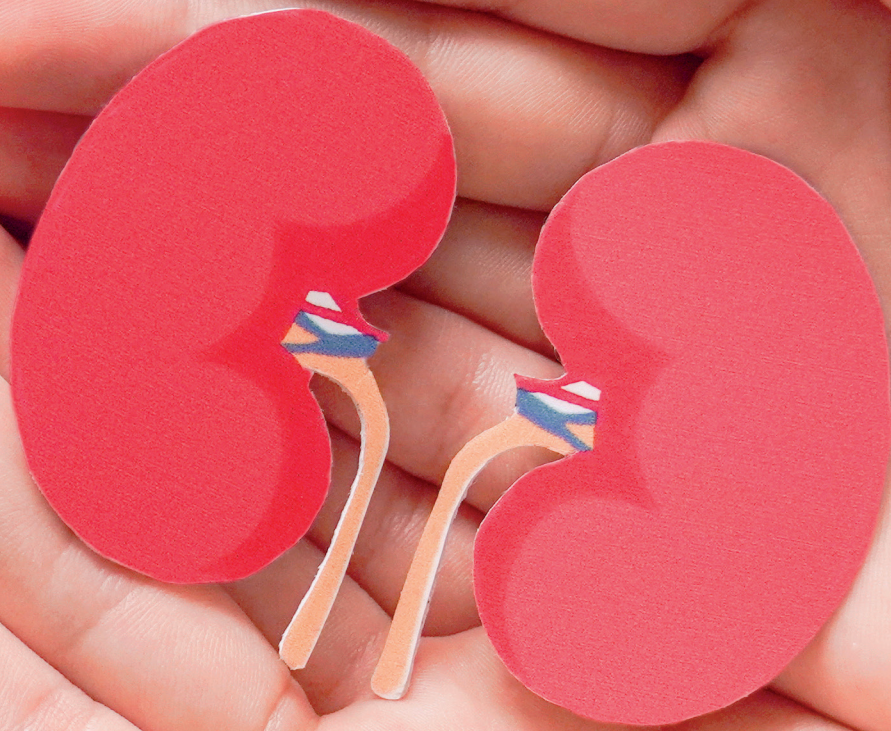




TTV R-GENE[®]

REAL TIME PCR ASSAYS - ARGENE[®] BIOMARKER

Guiding Transplant
Risk Management



PIONEERING DIAGNOSTICS



TTV R-GENE®

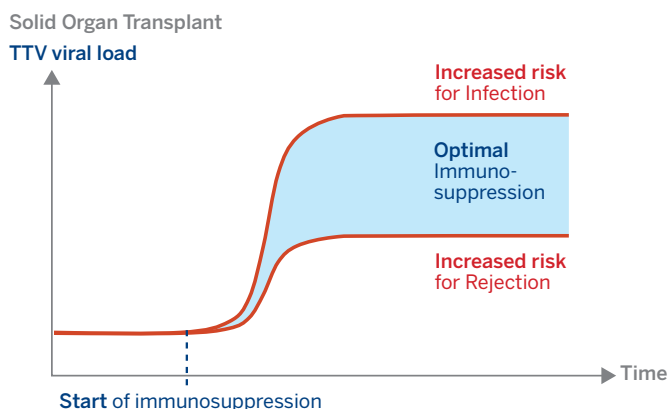
Towards tailored transplant patient management

Graft success after transplant surgery requires a **fine balance** of the immunosuppression to **prevent rejection but also opportunistic infections**. TTVR-GENE®, a complete ready-to-use TTV detection and quantification kit, is a **promising innovation** for transplant patient management. The Torque Teno virus (TTV) is a non-pathogenic virus carried by nearly everyone and interestingly research has demonstrated TTV peripheral blood copy number is associated with the grade of the immunosuppression of the host^{1,2,3}. TTV viral load, for example, has been demonstrated as being predictive for the development of infection in kidney transplant recipients⁴ and has also been associated with the prediction of organ rejection^{5,6}.

TTV viral load could be used to tailor therapy for transplant patients to achieve the individual balance for optimal immunosuppression.

The project, TTV GUIDE TX, funded by the European Union Framework Programme for Research and Innovation Horizon 2020, aims to demonstrate the safety and preliminary efficacy of TTV-guided dosing of immunosuppressive drugs in kidney transplant recipients.

Find out more about the project at: <https://www.ttv-guide.eu/>



KEY FEATURES

- Real-time detection and quantification of all human TTV species
- Same procedure as the ARGENE® Transplant range
- Complete kit with ready-to-use reagents
- Validated on EMAG® and other extraction systems
- Validated on major real-time PCR platforms
- CE-IVD Marked

ORDERING INFORMATION	TTV R-GENE® - REF : 423 414	
Gene target	5'-UTR region (untranslated region)	
Controls included	Internal Control (IC2), 4 Quantification Standards (QS), Sensitivity Control (SC), Negative Control	
Tested Specimen	Whole blood, Plasma	
Tested Platforms	Extraction	Amplification
	EMAG® NUCLISENS® easyMAG® MagNA Pure 96 QIAAsymphony SP	ABI 7500 Fast, ABI 7500 Fast Dx LightCycler 480 System II Rotor-Gene Q QuantStudio 5, QuantStudio 5 Dx, CFX96 Real-Time System
Reporting units	Copies/mL	

REFERENCES

1. Fernández-Ruiz M, et al. Monitoring of alphatorquevirus DNA levels for the prediction of immunosuppression-related complications after kidney transplantation. *Am J Transplant*. 2019 Apr;19(4):1139-1149.
2. Rezahosseini O et al. Torque-Teno virus viral load as a potential endogenous marker of immune function in solid organ transplantation. *Transplant Rev*. 2019 Jul;33(3):137-144.
3. De Vlaminck, I. et al. Temporal Response of the Human Virome to Immunosuppression and Antiviral Therapy. *Cell* 155, 1178–1187 (2013).
4. Doberer K, et al. Torque teno virus for risk stratification of graft rejection and infection in kidney transplant recipients- *Am J Transplant*:20(8):2081-2090 (2020).
5. Strassl R, et al. Torque Teno Virus for Risk Stratification of Acute Biopsy-Proven Alloreactivity in Kidney Transplant Recipients. *J Infect Dis*. 2019 May 24;219(12):1934-1939.
6. Schiemann, M. et al. Torque Teno Virus Load—Inverse Association With Antibody-Mediated Rejection After Kidney Transplantation: *Transplantation* 101, 360–367 (2017).