ASSAY CHARACTERISTICS

**Anti C4d antibody (Cat.No: see applications)**
- Cat.No: BI-RC4D
  - for IHC (paraffin embedded and frozen tissue section)
- Cat.No: BI-RC4D-FITC
  - for flow cytometry application

**Endostatin ELISA (Cat.No.: BI-20742)**
- Method: Sandwich ELISA, 12x8 tests
- Sample matrix: serum, plasma (citrate, EDTA, heparin), urine protocol available
- Sample size: 5 µl neat sample volume / test
- Standard range: 0-85 nmol/l
- Incubation time: 3 h / 1 h / 30 min, room temperature

**OPG ELISA (Cat.No.: BI-20403)**
- Method: Sandwich ELISA, 12x8 tests
- Sample matrix: serum, plasma (citrate, EDTA, heparin)
- Sample size: 20 µl / test
- Standard range: 0-20 pmol/l
- Incubation time: 4 h / 1 h / 30 min, room temperature

**Sclerostin ELISA (Cat.No.: BI-20492)**
- Method: Sandwich ELISA, 12x8 tests
- Sample matrix: serum, plasma (citrate, EDTA, heparin)
- Sample size: 20 µl / test
- Standard range: 0-240 pmol/l
- Incubation time: overnight / 1 h / 30 min, room temperature
**ANTI C4d**

**FOR THE HUMORAL REJECTION IN RENAL, HEART AND LUNG TRANSPLANTS**

  "...C4d SAB is potentially a powerful tool for risk stratification prior to transplantation and may allow identification of unacceptable donor antigens, or patients who may require enhanced immuno-suppression."

  "Our data suggest particular efficiency of solid-phase complement detection as a tool for virtual crossmatching."

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**ENDOSTATIN**

**FOR THE PROGRESSION OF KIDNEY DISEASE**

  "These data indicate that elevated plasma endostatin is strongly and independently associated with CKD."

  "Endostatin levels were greater in kidney transplant recipients compared with liver transplant recipients and healthy control subjects. Endostatin may play a role in the development of atherosclerosis after kidney transplantation and may serve as a biomarker for atherosclerotic disease."

  "Enhanced CEC reflects an increased activity of vascular injury. A deficient VEGF in the presence of enhanced angiogenesis (endostatin) implies a defective angiogenesis. This may explain the progressive nature of renal microvascular disease observed in late stage of CKD patients."

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**OSTEOPROTEGERIN**

**FOR THE PREDICTION OF CARDIO-VASCULAR MORTALITY**

  "In a large cohort of kidney transplant patients with long-term follow-up, OPG was independently associated with renal events, CV events and mortality."

- Serum osteoprotegerin is a predictor of progression of atherosclerosis and coronary calcification in hemodialysis patients. Kurnatowska I et al., Nephron Clin Pract, 2011; 117(4): c297-304
  "The plasma level of OPG could serve as a surrogate marker of progression of atherosclerosis and calcification in patients with end-stage renal disease."

  "These data support a strong relationship between serum OPG and arterial stiffness independent of many potential confounders including traditional cardiovascular risk factors..."

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**SCLEROSTIN**

**FOR THE DIAGNOSIS OF HIGH BONE TURNOVER IN CKD**

  "Sclerostin levels were significantly higher in dialysis patients than controls."

- Sclerostin and DKK-1 levels in pre-dialysis CKD patients. Behets G et al., Nephrol Dial Transplant, 2012; 27: 1366-1372
  "Serum Sclerostin levels but not DKK-1 levels increased along the progression of renal disease."

- The Relation between Renal Function and Serum Sclerostin in Adult Patients with CKD. Pelletier S et al., Clin J Am Soc Nephrol, 2013; 8: 819-823
  "...higher serum Sclerostin levels starting at CKD stage III."

  "Higher circulating Sclerostin levels were associated with decreased mortality in prevalent HD patients."