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# Serum, Blood and Body Weight Measurements in Pigs

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**Protocol status:** Working

We use this protocol and it's working

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**Keywords:** pig models, serum chemistry, blood cell counts, cardiovascular, retinopathy, neuropathy, nephropathy, pediatric endocrinology, uropathy, wound-healing

## Abstract

### Summary:

These assays are performed on all the pig models studied by the DiaComp to assess their serum chemistry and blood cell counts.

### Diabetic Complications:



Cardiovascular



Retinopathy



Neuropathy



Nephropathy



Pediatric Endocrinology



Urology



Wound-Healing

## 1 **Total cholesterol**

Cholesterol is measured by a commercial, automated method (ANTECH® Inc. Cary, NC).

## 2 **Serum assays**

All serum assays are measured by a commercial, automated method (ANTECH® Inc. Cary, NC).

## 3 **Red blood cell count, White blood cell count, Hemoglobin, Hematocrit, Platelet count**

White blood cell count, red blood cell count, hemoglobin, hematocrit, and platelet count are performed on EDTA anti-coagulated blood with a cell counter (Heska) calibrated for pig cells.

## 4 **Body weight**

Pigs are weighed on calibrated scales.

## 5 **Percent body fat**

The percent body fat is determined from measuring the backfat by ultrasound (Fukuda Denshi, model UF750XT) or the Swine Backfat Probe (Nasco, WI) according to the manufacturer's instructions.