Abstract
Canine Hepatozoonosis is a vector-borne disease caused by the protozoa Hepatozoon spp. There are few case reports in Brazil and the epidemiology, pathogenicity, vectors and molecular characterization is poorly understood. The present study used a canine presenting weight loss, regenerative anemia, neutropenia and hyperglobulinemia. Hepatozoon spp. gamonts were observed in the blood smear by microscopy. DNA was extracted from blood, and the diagnosis was confirmed by PCR assay. The PCR product was purified from gel and cloned. A fragment of 625bp was sequenced and submitted to the GenBank database as Isolate Porto Alegre. Molecular analysis showed a homology of 98-100% with Hepatozoon canis and less than 92% for H. americanum. This study represents the first molecular confirmation that H. canis is present in Southern Brazil.

Keywords
Hepatozoon canis, hemoparasite, dog, PCR, Brazil.