What is the level of similarity between genomic sequences of different breeds of dogs ?

The process of domestication involves strong selection of specific phenotypes; therefore, a signal of this selection should be evident in the genome. Using the single nucleotide polymorphism (SNP) analysis and the Neighbour-joining trees reveal that most of the following breeds (Basenji, Afghan Hound, Samoyed, Saluki, Canaan Dog, New Guinea Singing Dog, Dingo, Chow-Chow, Chinese Shar-Pei, Akita, Alaskan Malamute, Siberian Husky and American Eskimo Dog) are highly divergent from other dog breeds. These highly divergent breeds have been identified previously and termed 'ancient' breeds (as opposed to 'modern'). The difference in SNP may be associated with cancer types or cancer drug responses.

Reference: vonHold et al, Genome-wide SNP and haplotype analyses reveal a rich history underlying dog domestication. Nature. 2010 Apr 8; 464(7290): 898–902.