



March 2019 Update

60% Sample Collection Goal Reached!



Background: Japanese Akitas worldwide have been affected by autoimmune conditions such as sebaceous adenitis (SA) and uveodermatologic syndrome (commonly referred to as VKH) with a complex mode of inheritance. Breeders currently have no way of screening breeding stock for potential to produce autoimmune conditions in the offspring. Animal Health Trust (AHT) has offered to build on the *Give a Dog a Genome* (GDG) study and conduct a project on Sebaceous Adenitis in the Japanese Akita Inu (JAI SA) provided sample collection and fundraising targets are met.

Status: The Japanese Akita Inu samples submitted to the GDG project has been sequenced and the data has been downloaded. The next step is to perform a genome wide association study (GWAS) study, which will then allow the research team to target the full genome DNA analysis to the likely areas of the sequence, therefore greatly improve the chances of successfully identifying the genes involved in SA. In order to commence the GWAS study, we need additional funding and 50 samples from SA affected Japanese Akita Inu's and 50 samples from healthy control dogs (defined as over the age of 8 years with Japanese Akita Inu pedigree, no signs of SA).

JAIC and JACA have enlisted the support and assistance of the Japanese Akita Inu community worldwide to gather cheek swab samples of both SA-affected dogs, and healthy control dogs. Monetary donations towards covering the costs of the test development is also underway.

Fundraising status: Thanks to the generous donation of exclusive Christmas ornaments from the JACA breed health coordinator, the Japanese Akita Inu club have raised a total of £435. The Dutch Nippon Inu Club donated €336 (£292.90) in 2018 and JACA have raised \$2,775 (approx. £2,150) towards the funding for the GWAS Study. **This gives us a total to date of: £2,878**



Summary of sample collection progress: We have 60% of the samples required for the GWAS Study, and additional healthy samples from dogs under 8, many related to SA-affected dogs. We thank breeders and owners from the following countries for rallying to the cause: UK, Australia, Austria, Belgium, Brazil, Canada, Cyprus, Finland, France, Germany, Greece, Hungary, Ireland, Italy, Netherlands, Norway, Poland, Portugal, Slovenia, Thailand, and the USA.

Affected			
	USA	Other	Total
Sebaceous Adenitis	12	18	30
VDH	3	0	3
Pemphigus	3	1	4
Atopic Dermatitis	0	3	3
Vitiligo	0	2	3
Total	19	24	43

Unaffected			
	USA	Other	Total
>8 years	9	20	29
6-8 years	16	15	31
<6 years	52	80	132
Total	96	139	235

If you have a Japanese Akita Inu with pedigree and would like to contribute, please contact:

- Kate Huggins at SAResearch@japaneseakita-inu.co.uk
- Bekki Leu at Bekki@akita-inu.com

In addition, we are raising funds to enable the future research project when sample collection goals are met. You can donate to the cause per below, any amount will help!

- In UK, PayPal to: paypal@japaneseakita-inu.co.uk with the reference: **SA Research**
- In US, PayPal to: donations@akita-inu.com with the reference: **AHT**

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Note: The samples are handled with complete confidentiality. No one outside of the research team at the AHT will know the details of the dogs submitted for the research, the clubs coordinating the project will only know how many SA and samples have been submitted but will not receive any other information.

