SPAID, POAG/PLL statistics 2021 / 2022 mainly based on samples from European countries (Laboklin Germany, Bad Kissingen)

Author: Alexandra Gabrisch

Source: Laboklin Bad Kissingen, Germany in written exchange with the author and with permission to the

author to publish the data

This report was written by Alexandra Gabrisch for the European Federation of Shar Pei Clubs.

The data and the content of this text may not be reproduced in any way that violates strict data protection

regulations.

SPAID

Number of tested Shar Pei

By the end of 2021, approximately **2500** Shar Pei have been analysed (* *Laboklin has been testing since summer 2017*)

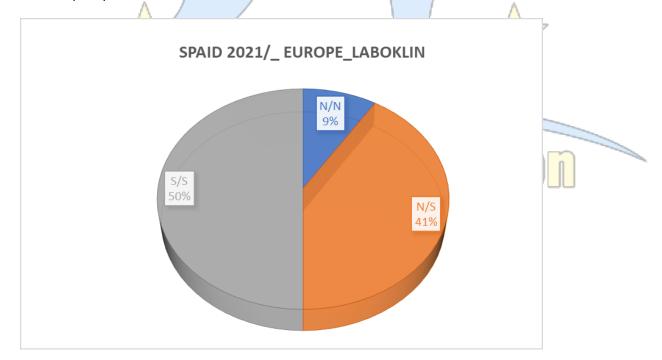
Percentage distribution of genotypes by N/N, N/SPAID and SPAID/SPAID

N/N 9%

N/SPAID 41%

SPAID/SPAID 50 %

Allele frequency for SPAID: 70.5 %



^{*} unconditional breeding consideration / unconditional development of a breeding strategy at a allele frequency > 20 % (allele frequencies < = 5-10 % are desirable)

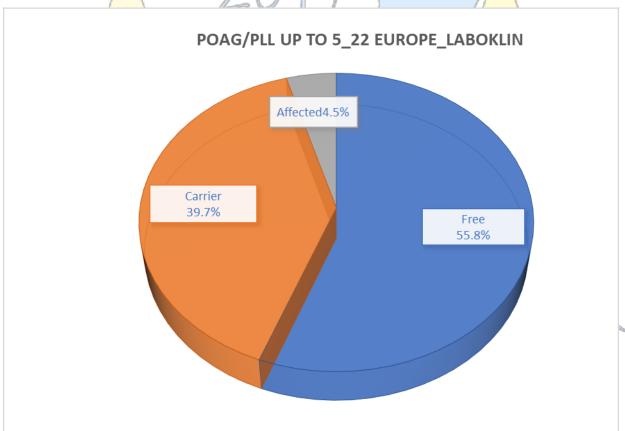
^{*} notes marked with * were added by the author. The notes base on telephone information from Laboklin on demand for correspondence. 08.22

POAG/PLL (up to 05.22)

Number of tested Shar Pei: 1300

Percentage distribution of genotypes by "free" (N/N), "carrier" (N/POAGPLL) and "affected" (PAOGPLL/POAGPLL)





The allele frequency for the causative variant for POAG/PLL is also here in a range that should be considered in breeding. In about 45% of the dogs tested there is at least one causative variant, so that an accidental mating without knowledge of the genetics of the parents has a high risk of developing affected puppies.

^{*}An assignment of the POAG/PLL results to the SPAID results N/N, N/S and S/S has not yet been carried out and is also not planned.

^{*} notes marked with * were added by the author. The notes base on telephone information from Laboklin on demand for correspondence. 08.22

FAQ

From which countries does Laboklin receive the samples?

Laboklin receives samples from all European countries on a regular basis, as well as rare samples from Asia, America and worldwide. An exact breakdown of the result by country is currently not available.

What was the number of samples sent by veterinarians compared to sent by private owners or breeders?

The number of samples that have been sent in is roughly balanced between veterinarians and owners / breeders, whereby a certain numbers of the samples that are charged to owners / breeders are also sent by veterinarians.

Can sending cheeks swabs lead to different results compared to EDTA blood?

Smear samples (cheek swabs from the mucous membrane of the inner side of the cheek) and blood samples should give the same result if taken correctly.

In the case of swabs there is a higher risk of contamination and thus inhibition of the PCR or, in the worst case, incorrect results in the case of cross-contamination.

* Cross contamination (usually mixing the saliva of different individuals)

With correct sampling and under ideal conditions, the sample materials are equivalent. Laboklin generally recommends blood sampling by the veterinarian for all official results.

Only for results that have been evaluated by blood you can apply for an official certificate from Laboklin!

Does Laboklin now make recommendations to veterinarians on how to deal with the result SS and NS? For example: regular blood checks taking into account the SDMA value or recommendations to support the immune system or similar?

Laboklin as a diagnostic laboratory is always ready to advise and help. For a comprehensive diagnosis, the assessment of the dog itself is always necessary.

Therefore, Laboklin does not give direct recommendations regarding further treatment for only genetic results.

* Laboklin has basically no detailed information about t<mark>he disease of the dog or whethe</mark>r there are any diseases caused by SPAID. At the request of the client and descri<mark>ption of the symptoms, Laboklin would help with recommendations for treatment.</mark>

If you are interested in genetic tests for SPAID and POAG /PLL please contact Laboklin office in your country or better speak with your veterinarians. Laboklin accepts samples from veterinarians as well as from owners / breeder for analysis. Unclear results will not be transmitted. If a result is not validated according to the strict quality criteria to which Laboklin undertakes to validate, Laboklin require the sender to send a new sample for analysis.

https://shop.labogen.com/en/ (please select language on the website)

In order to evaluate the success of the breeding activity of responsible breeders, it will be interesting for all of us to compare the results in the following periods.

^{*} notes marked with * were added by the author. The notes base on telephone information from Laboklin on demand for correspondence. 08.22