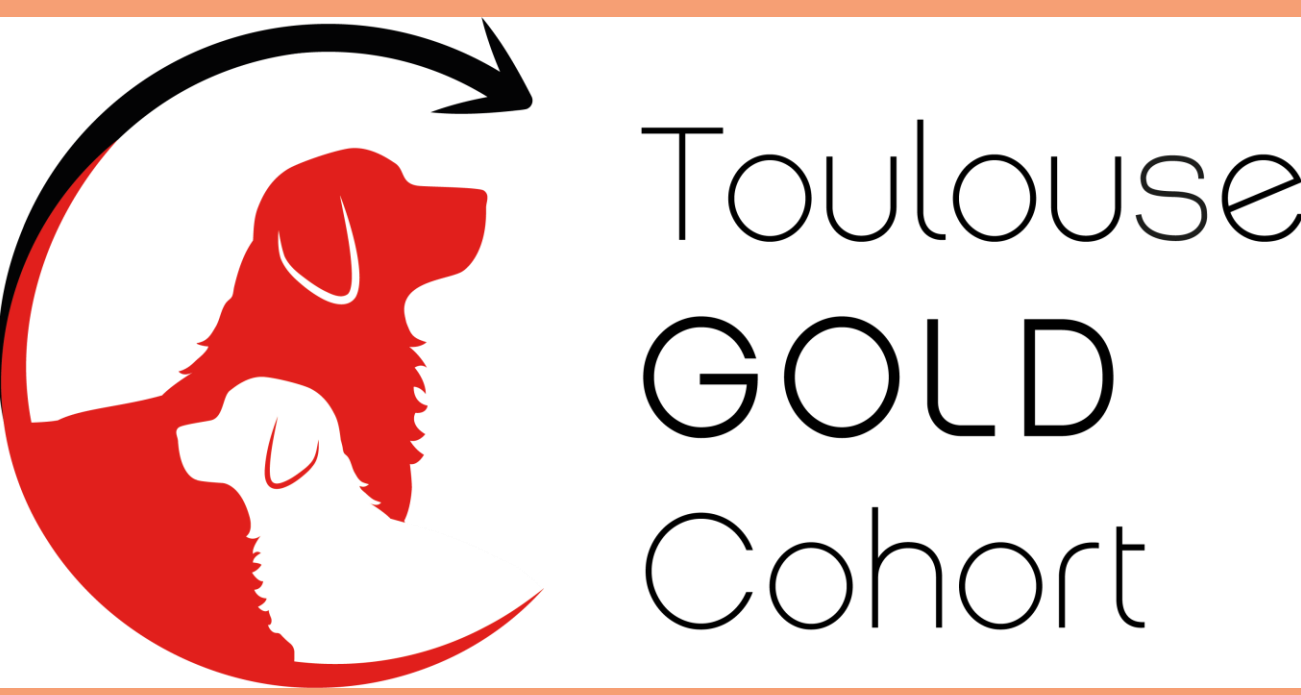




Description of the Toulouse GOLD Cohort :

an open science study to better characterize the first days of life and their short, medium and long-term consequences in dogs.

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INTRODUCTION

In many mammalian species, events occurring during the perinatal period, induce physiological changes that can persist throughout an individual's life, with consequences for long-term health (developmental origins of health and disease concept). Early-life establishment of intestinal microbiota seems to play a decisive role in shaping the future health of the host, through its association with immune system development. In dogs, none of the four major canine longitudinal studies in progress (“Dogslife”, “Golden Retriever Lifetime Study”, “Generation Pup” and “Dog Ageing Project”) have evaluated the influence of early life on appearance of chronic inflammatory diseases.

This poster describes the **design of the Toulouse GOLD Cohort project that has been set up to collect data prospectively from the end of gestation until adulthood in order to investigate the effects of the fetal and neonatal periods on short-, medium- and long-term health of dogs and to present the “early Cohort”**

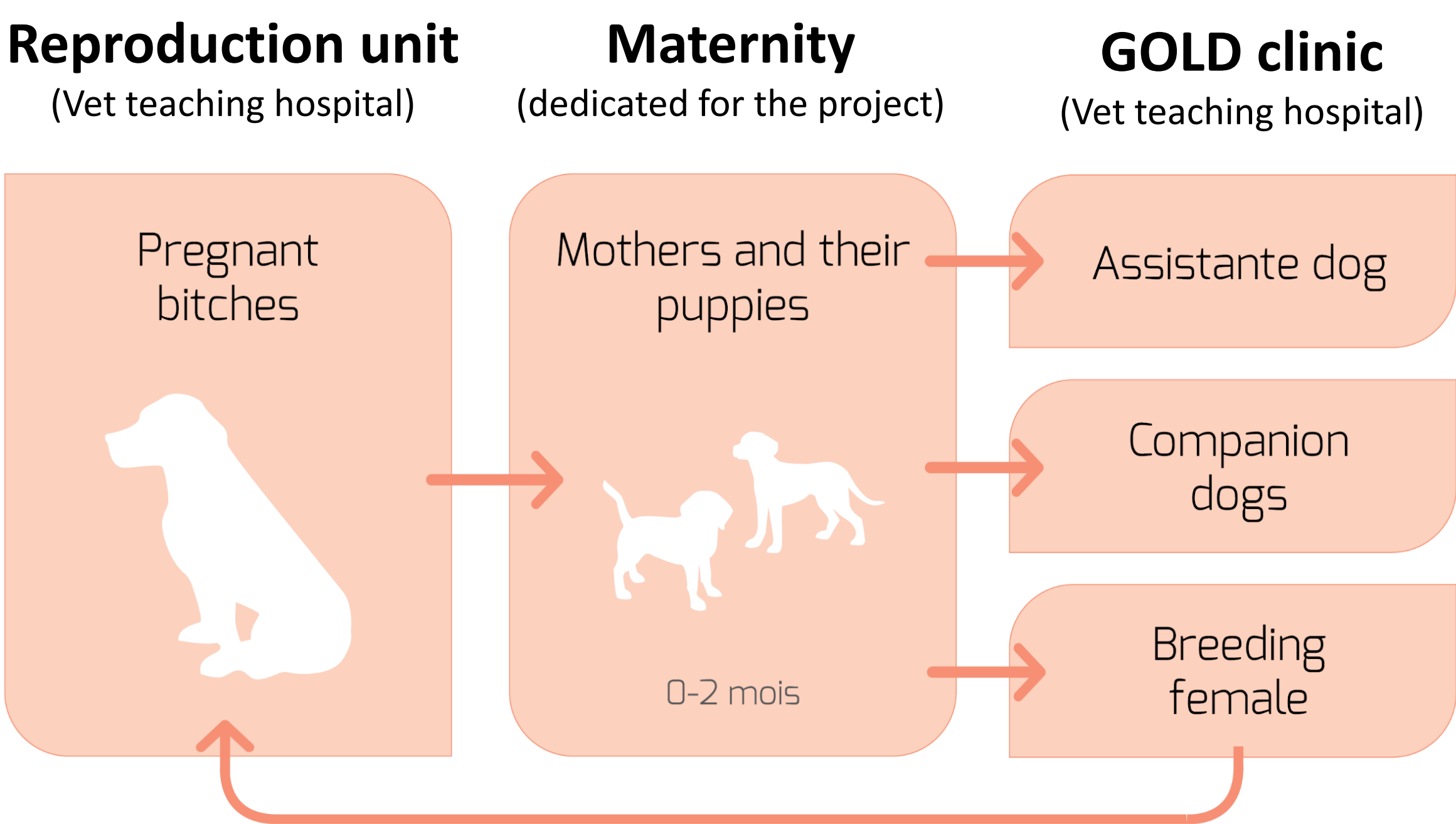
Prospective Golden Retriever cohort with 3 objectives

Created in 2022 at the National Vet School of Toulouse



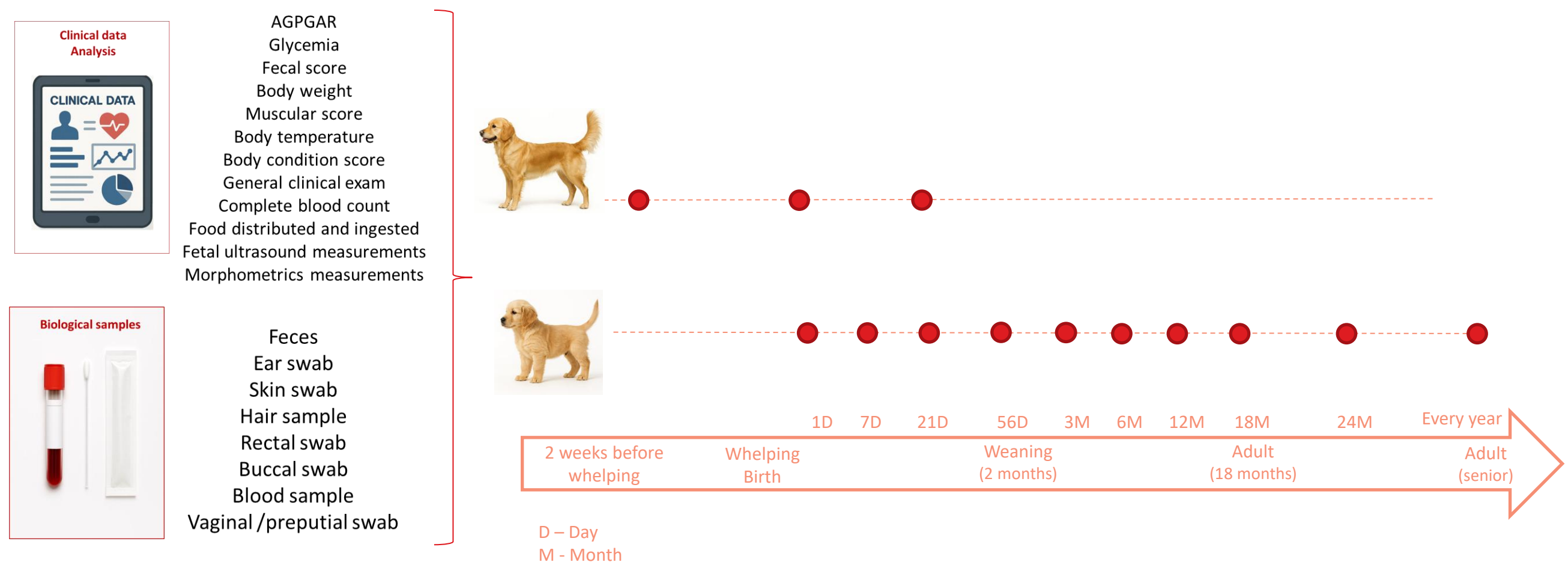
STUDY DESIGN

Continuous follow-up



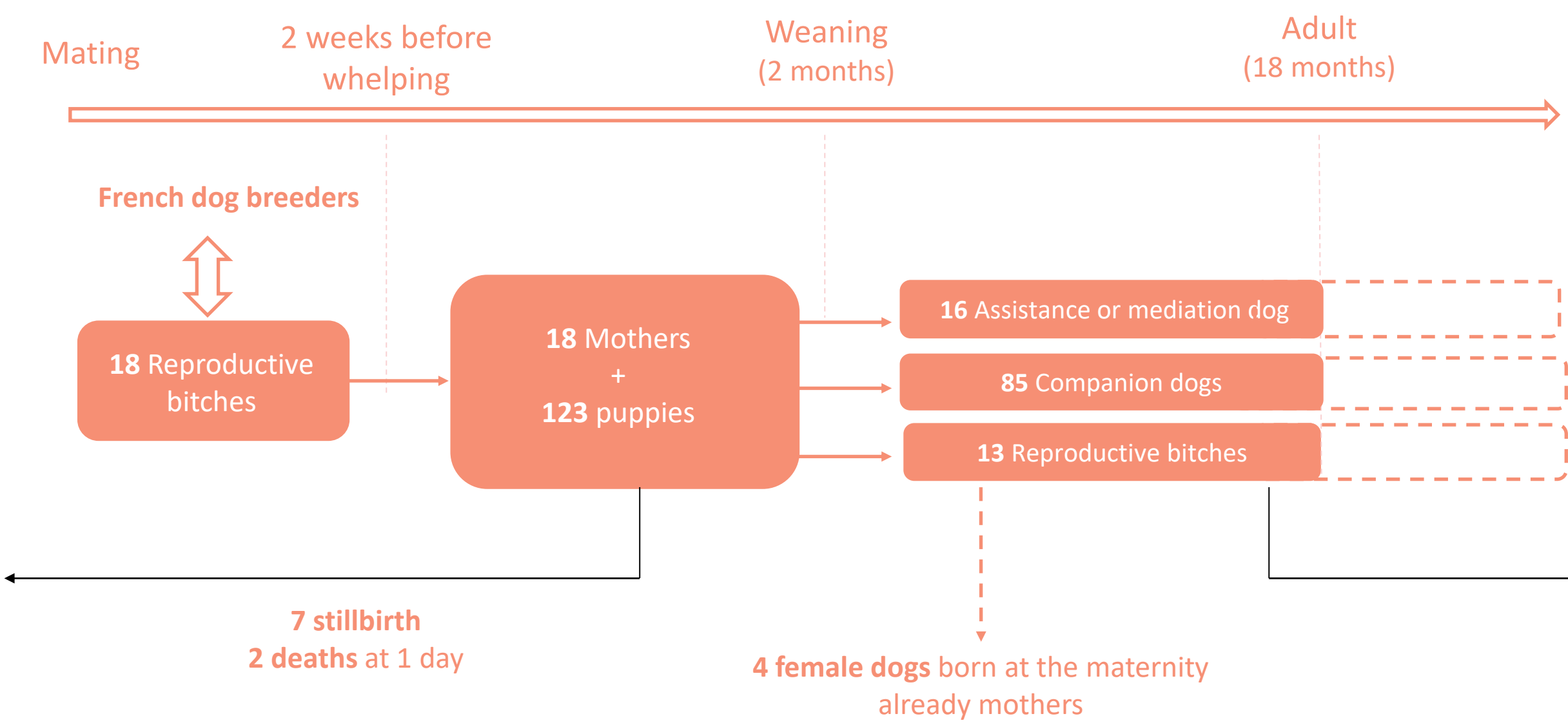
METHODOLOGY

Clinical data and biological samples collected



Variables	Early Cohort	Litterature	Reference
Litter size	6.8	7.2	Mugnier A et al 2019
Still-birth	5.7%	7.4%	Chastant S et al 2017
Neonatal mortality (0-3 weeks)	1.6%	8.1%	Mugnier A et al 2019
Sex Ratio	1.0	1.0	Mugnier A et al 2019
Birth Weight (g)	410.5	395.4	Mugnier A et al 2019
Very low birth weight puppies (<177g)	0.8%	1%	Mugnier A et al 2020
Low birth weight puppies (177.5-417 g)	50%	61.1%	Mugnier A et al 2020
Growth rate 0-2 days	6.1%	7.3%	Mugnier et al 2023

PRELIMINARY RESULTS - the « Early Cohort »



Cases of chronic diseases and comorbidities identified among the first animals in the cohort (n= 113)

Chronic enteropathy	Atopic dermatitis	Follicular conjunctivitis	Obesity
12	6	10	7

CONCLUSION

Preliminary results confirmed the feasibility of collecting extensive, high-quality data and biological samples. The minimally invasive procedures allowed for continuous, detailed monitoring of the early life stages and their effects on health status. Our goal is to maintain this cohort indefinitely. The **Toulouse GOLD Cohort** makes available to the research community not only some of the data it collects, but also its research platform, acting as a facilitator to explore new hypotheses on canine health.

A proposition to collaborate on this cohort

