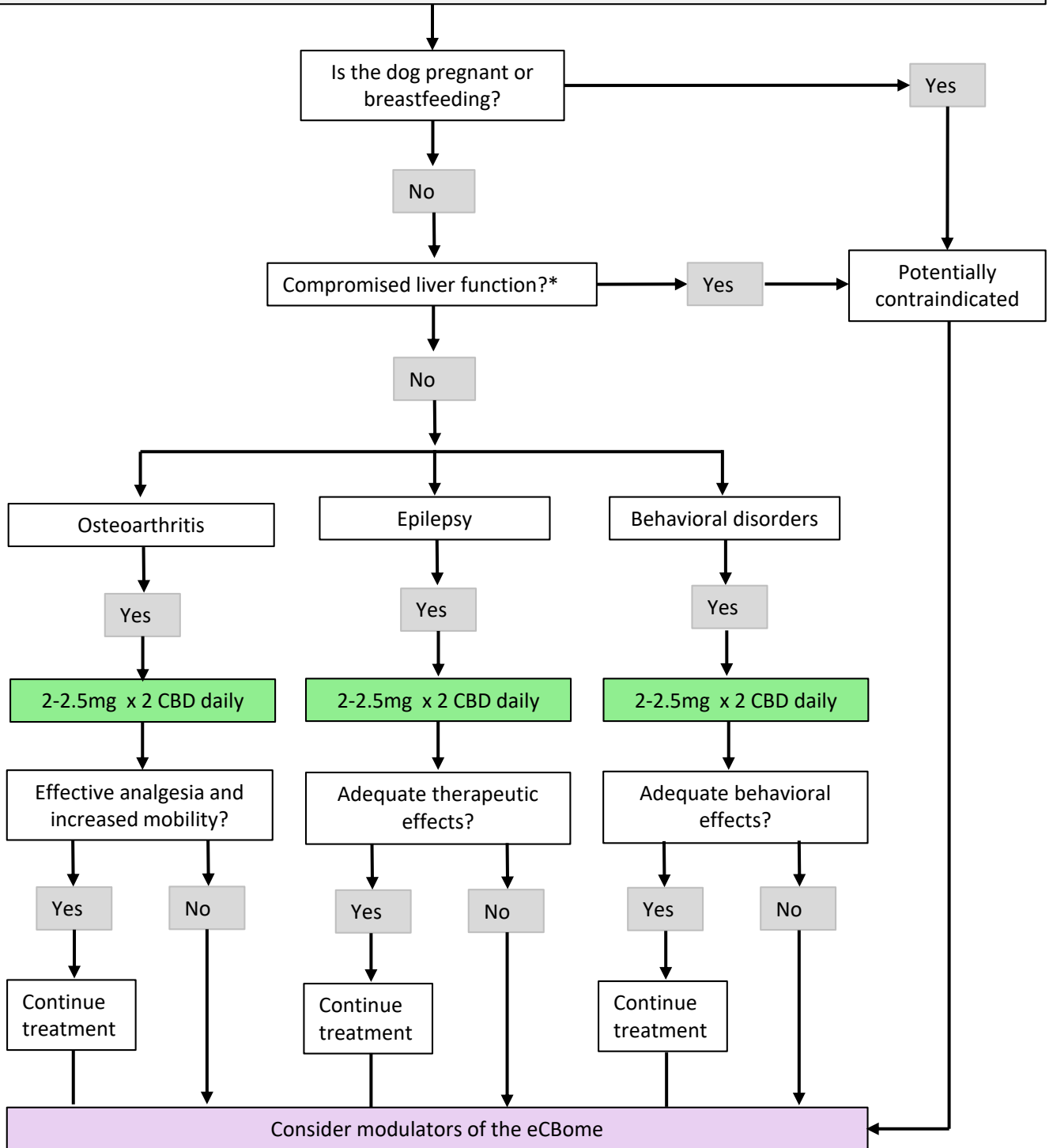


# Veterinary Applications for Canines Screening Process & Treatment Protocol



\*Consider testing for total bilirubin and elevation of liver enzymes that indicate liver stress/injury, i.e., Alanine aminotransferase (ALT) and Aspartate aminotransferase (AST).

**References:** Lima T de M, Santiago NR, Alves ECR, Chaves DS de A, Visacri MB. [Use of cannabis in the treatment of animals: a systematic review of randomized clinical trials](#). Animal Health Research Reviews. 2022;23(1):25-38.

# Veterinary Applications Screening Process & Treatment Protocol



## Other Cannabis Constituents and Modulators of the eCBome for Veterinary Applications

### Other Cannabinoids

- **Cannabigerol (CBG):** A case study showed significant improvements in a dog diagnosed with compulsive disorder after twice-daily administration of a cannabinoid-based oral oil preparation containing Bedica (14% THC, 0.1 mg/kg), CBD (0.13 mg/kg), CBG (0.1 mg/kg), and 5 mg of conjugated melatonin ([L. Sacchettino et al., 2023](#)). Note that the acid form of CBGA is absorbed ~40 times better than CBG and has no adverse effects ([K. Amstuz et al., 2023](#)).

### Terpenes

- **Beta-caryophyllene (BCP):** This terpene induces analgesic and disease-modifying properties in dogs with osteoarthritis ([J. Mlost et al., 2022](#)).

### Lipidome

- **↑ Omega-3:** Low levels of dietary omega-3s are associated with an increased risk of developing neuropsychiatric diseases ([T. Larrieu et al., 2012](#)). Omega-3 supplements (330 mg eicosapentaenoic acid and 480 mg docosahexaenoic acid with 12-15 mg/kg of magnesium citrate and 5 mg/kg of zinc sulfate may improve behavioral disorders ([M. R. Niyyat et al., 2018](#)). An average dose of 69 mg EPA+DHA/kg/ improved all clinical signs of osteoarthritis in dogs ([S.J. Mehler et al., 2016](#)).
- **↓ Omega-6:** While omega-6 fatty acids are essential for normal physiological function in dogs and cats, a high omega-6 to omega-3 ratio will foster a pro-inflammatory state ([S. Burron et al., 2024](#)).

### Nutraceuticals

- **Phycocyanin (Spirulina):** Dietary supplemented with Spirulina significantly enhanced dogs' immune response and gut health ([E. Satyaraj et al., 2021](#)).
- **Palmitoylethanolamide (PEA):** A dose of ~10 mg/kg of ultra-micronized PEA appears to be a safe and effective treatment for pruritis and atopic dermatitis ([C. Noli et al., 2015](#)).

### Dietary considerations

- **Pre-fed stomach:** Eating healthy, fatty foods with CBD enhances its effects ([K. Mozaffari et al., 2021](#)).
- Reduce intake of highly processed foods

### Microbiome

- **↑ Pro- and Pre-biotics:** The microbiome plays a significant role in canine health. Functional foods that include probiotics and prebiotics improve canine health and well-being ([K. A. Baritugo et al., 2023](#)).