



Jaguar Animal Health Issues Racing Data Summary for Horses Participating in the Company's Recently Completed Dose Determination Study for its Drug Product Candidate for Equine Gastric Ulcer Syndrome

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A Full Analysis of the Study Data with Scoring of Squamous and Glandular Ulcers is Expected to be Available in January

SAN FRANCISCO--(BUSINESS WIRE)--Nov. 14, 2016-- Jaguar Animal Health, Inc. (NASDAQ:JAGX) ("Jaguar"), an animal health company focused on developing and commercializing first-in-class gastrointestinal products for companion and production animals, foals, and high value horses, today issued a summary of racing data for horses taking part in the Company's recently completed dose determination study of the target commercial paste formulation of Equilevia™ (formerly referred to as SB-300), the Company's drug product candidate for treatment of Equine Gastric Ulcer Syndrome ("EGUS").

Equilevia™ is a pharmaceutical formulation of a standardized botanical extract. The randomized, blinded, controlled, multisite dose determination study enrolled 121 racehorses two years of age or older. All enrolled horses were diagnosed with glandular and squamous gastric ulcers. The primary objective of the study was to select the minimally effective dose of Equilevia™ for the treatment of equine gastric ulcers in a future pivotal field study.

Horses on treatment with Equilevia™ had higher average winnings as a percent of purse in races during the study treatment period compared with the period in which they raced prior to the study. Horses on placebo or on the positive control (Merial's GASTROGARD® product) had a reduction in their average winnings as a percent of purse during the study treatment period compared with the period in which they raced prior to the study.

Additionally, horses on treatment with Equilevia™ had higher average total dollar winnings in races during the study period compared with the period in which they raced prior to the study. However, horses on placebo had a reduction in total earnings in races during the study period compared with the period in which they raced prior to the study, whereas horses on GASTROGARD® had essentially no change in their earnings in races compared with the period in which they raced prior to the study.

When analyzing data according to whether or not a horse finished a race in the top 3 or in the top 5, there was also an improvement seen for horses treated with Equilevia™ during the study treatment period compared with the period in which they raced prior to the study. Horses treated with placebo, however, had a reduction in frequency of finishing in the top 3 or in the top 5 in the study period compared with the period in which they raced prior to the study.

No statistically significant comparisons were generated for the aforementioned exploratory analyses.

"Racing results in horses treated with Equilevia™ during our dose determination study are of interest because ulcers are a particular problem in equine athletes," stated Lisa Conte, Jaguar's president and CEO. "This study was not powered for this type of result nor would we expect to have such a result listed in a product label."

During the dose determination study, endoscopies were obtained at baseline, prior to the start of treatment, on day 15 and finally on day 29 of treatment. The equine veterinarians performing the endoscopies were blinded to the treatment assignment, and the Company is also blinded to these data at this time. A full analysis of the dose determination study data with scoring of squamous and glandular ulcers is awaiting an independent, blinded review by an equine veterinarian experienced in gastric ulcer disease, and is expected to be available this coming January. Review will include comparisons of more than one scoring system in order to identify the best means of assessing clinical improvement of both squamous and glandular lesions for a proposed primary endpoint. Jaguar's intention is to identify a scoring system that most appropriately demonstrates clinical change in both squamous and glandular ulcers, and the Company plans to seek concurrence from the FDA's Center for Veterinary Medicine ("CVM") with regard to the selected scoring system.

"We believe independent analysis of the endoscopy data from this study is highly important—both to ensure consistency of grading and to determine the most clinically relevant endpoint scoring system for our planned field trial," commented Dr. Roger Waltzman, Jaguar's Chief Scientific Officer. "Ultimately, this analysis will be presented to CVM with the intention of developing a pivotal field study with concurrence in the protocol design and statistical analysis."

As Jaguar announced this past January, topline results from its proof-of-concept study to evaluate the safety and effectiveness of Equilevia™ indicate that 78 to 89% of horses treated with Equilevia™ (depending on dose) had resolution or improvement of glandular ulcers as soon as 14 days during treatment. As Jaguar announced this past February, further analysis of the results of the proof-of-concept study indicates that Equilevia™ did not alter

gastric pH during the 28-day trial, or for 7 days after therapy. A treatment for EGUS that does not alter gastric pH is important because maintaining low gastric pH may be helpful for digestion, for gut immunity and first line defense against pathogens, for the absorption of vitamins and minerals, and for potentially additional downstream effects. As Jaguar announced in May of this year, standard drug testing in race horses that received Equilevia™ did not detect any substances commonly disallowed by horse racing authorities.

Data from the American Horse Council states that there are currently 9.2 million horses in the U.S., a population that includes 844,531 race horses, more than 2.7 million show horses, and more than 3.9 million recreational horses. Data from the Food and Agriculture Organization of the United Nations indicate that there were approximately 5.7 million horses in Europe in 2013 and nearly 60 million horses in 2013 worldwide. According to a third-party 2005 study, as many as 55% of performance horses have both colonic and gastric ulcers, and 97% of performance horses have either a gastric (87%) or a colonic (63%) ulcer.¹

About Jaguar Animal Health, Inc.

Jaguar Animal Health, Inc. is an animal health company focused on developing and commercializing first-in-class gastrointestinal products for companion and production animals, foals, and high value horses. Canalevia™ is Jaguar's lead prescription drug product candidate, intended for the treatment of various forms of diarrhea in dogs. Equilevia™ (formerly referred to as SB-300) is Jaguar's prescription drug product candidate for the treatment of gastrointestinal ulcers in horses. Canalevia™ and Equilevia™ contain ingredients isolated and purified from the *Croton lechleri* tree, which is sustainably harvested. Neonorm™ Calf and Neonorm™ Foal are the Company's lead non-prescription products. Neonorm™ is a standardized botanical extract derived from the *Croton lechleri* tree. Canalevia™ and Neonorm™ are distinct products that act at the same last step in a physiological pathway generally present in mammals. Jaguar has nine active investigational new animal drug applications, or INADs, filed with the FDA and intends to develop species-specific formulations of Neonorm™ in six additional target species, formulations of Equilevia™ in horses, and Canalevia™ for cats and dogs.

For more information, please visit www.jaguaranimalhealth.com.

Forward-Looking Statements

Certain statements in this press release constitute "forward-looking statements" within the meaning of section 27A of the Securities Act of 1933 and section 21E of the Securities Exchange Act of 1934. These include statements regarding Jaguar's expectation that a full analysis of the dose determination study data with scoring of squamous and glandular ulcers will be available this coming January, the Company's plans to seek concurrence from CVM regarding an endpoint scoring system for Jaguar's planned Equilevia™ pivotal field study, Jaguar's plan to develop formulations of Equilevia™ in horses and species-specific formulations of Neonorm™ in additional target species, and Jaguar's plan to develop formulations of Canalevia™ for cats and dogs. In some cases, you can identify forward-looking statements by terms such as "may," "will," "should," "expect," "plan," "aim," "anticipate," "could," "intend," "target," "project," "contemplate," "believe," "estimate," "predict," "potential" or "continue" or the negative of these terms or other similar expressions. The forward-looking statements in this release are only predictions. Jaguar has based these forward-looking statements largely on its current expectations and projections about future events. These forward-looking statements speak only as of the date of this release and are subject to a number of risks, uncertainties and assumptions, some of which cannot be predicted or quantified and some of which are beyond Jaguar's control. Except as required by applicable law, Jaguar does not plan to publicly update or revise any forward-looking statements contained herein, whether as a result of any new information, future events, changed circumstances or otherwise.

¹Pellegrini FL. *Results of a large-scale necroscopic study of equine colonic ulcers*. J Equine Vet Sci. 2005;25(3):113-117.

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