

cows has not been established, and this may differ with whether or not AI will be used. To allow for adequate estrous detection, a ratio of 1:30 to 1:50 would be needed. Without AI, and considering biostimulation appears to affect individual cows fairly early post partum, a ratio of 1:100 may be adequate. More than 1 cow can be used in a pasture successfully, although they will waste a lot of chin-ball marking ink mounting each other when no other cows are in heat.

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Abstract

Pulmonary function changes induced by three regimens of bronchodilating agents in calves with acute respiratory distress syndrome

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Two aerosolised bronchodilators, one sympathomimetic and one parasympatholytic, were tested either alone or in combination for their ability to improve the pulmonary function of double-musled calves suffering from acute respiratory distress syndrome. In control animals treated with 0.9 per cent saline the parameters of pulmonary function and signs of clinical distress did not change significantly within the hour following the first treatment. Among the other animals, both at one hour and seven days after the first treatment, the most clinical improvement was observed in the animals treated with both bronchodilators and the least in the

animals treated with clenbuterol hydrochloride. One hour after the first treatment the respiratory system compliance of the animals treated with ipratropium bromide and the arterial oxygen tension of the animals treated with both bronchodilators were significantly enhanced. After seven days the resistive parameters, the rectal temperature and the respiratory rate were also significantly improved in the animals treated with ipratropium bromide or both bronchodilators whereas only the respiratory rate and rectal temperature were significantly reduced in the animals treated with clenbuterol hydrochloride.