



**Brachycephalic Obstructive Airway Syndrome (BOAS) study
 Respiratory Function Assessment Form**

Name of dog:		Breed: _____	male / female
Kennel Club registration number (if applicable):		Microchip number (if applicable):	
Name of owner:			
Age:	Weight: _____ kg	Colour:	
	Body condition score (BCS): _____/9		
<p>Physical examination: * please note pre- and post- exercise test, if different.</p> <ul style="list-style-type: none"> • Respiratory patterns * : <input type="checkbox"/> Normal <input type="checkbox"/> Inspiratory effort <input type="checkbox"/> Dyspnoea • Nostrils: <input type="checkbox"/> Open <input type="checkbox"/> Mild stenosis <input type="checkbox"/> Moderate stenosis <input type="checkbox"/> Severe stenosis • Stertors (low pitch noise) * : <input type="checkbox"/> Not audible <input type="checkbox"/> Mild <input type="checkbox"/> Moderate <input type="checkbox"/> Severe • Stridor (high pitch noise) * : <input type="checkbox"/> Not audible <input type="checkbox"/> Mild <input type="checkbox"/> Moderate <input type="checkbox"/> Severe • Inspiratory effort * : <input type="checkbox"/> Not present <input type="checkbox"/> Mild <input type="checkbox"/> Moderate <input type="checkbox"/> Severe • Cyanosis and/or syncope * : <input type="checkbox"/> No <input type="checkbox"/> Yes _____ • Heart/lung auscultation: <input type="checkbox"/> Normal <input type="checkbox"/> Abnormal _____ 			
<p>BOAS Functional Grading: <input type="checkbox"/> Grade 0 <input type="checkbox"/> Grade I <input type="checkbox"/> Grade II <input type="checkbox"/> Grade III</p>			
<p><i>The above dog shows the physical characteristics and underwent the procedures as marked. The above report and its results are not a guarantee against any hereditary or acquired condition that may develop in the future.</i></p>			
<p>Additional comments:</p> <p><input type="checkbox"/> Monitoring needed (under 2 years old / Grade II-III)</p>			
Signature of Veterinary Surgeon		Date	
_____		_____	



BOAS Functional Grading for pugs

Grade 0 – Clinically unaffected. Free of respiratory signs; annual health check is suggested if the dog is under 2 years old.

Grade I – Clinically unaffected. Mild respiratory signs of BOAS but does not affect exercise performance. Annual health check is suggested if the dog is under 2 years old.

Grade II – Clinically affected. The dog has a clinically relevant respiratory signs and requires management, including weight loss and/or surgical intervention.

Grade III – Clinically affected, and should not be bred. Severe respiratory signs of BOAS. The dog should have a thorough veterinary examination with treatment.

		Respiratory noise^a	Inspiratory effort^b	Dyspnoea/ Cyanosis/ Syncope^c
Grade 0	Pre-ET	Not audible	Not present	Not present
	Post-ET	Not audible	Not present	Not present
Grade I	Pre-ET	Not audible to mild stertor, and/or moderate intermittent nasal stertor when sniffing ^d	Not present	Not present
	Post-ET	Mild stertor or stridor, and/or moderate intermittent nasal stertor when sniffing ^d , and/or intermittent gentle stertor when panting	Not present to mild	Not present
Grade II	Pre-ET	Mild to moderate stertor or stridor	Not present to moderate	Not present
	Post-ET	Moderate to severe stertor or stridor	Moderate to severe	Dyspnoea; cyanosis or syncope not present
Grade III	Pre-ET	Moderate to severe stertor or stridor	Moderate to severe	Dyspnoea; may or may not present cyanosis. Inability to exercise.
	Post-ET	Severe stertor or stridor	Severe	Dyspnoea; may or may not present cyanosis or syncope.

ET, exercise test



Veterinary Guidance

- **Initial examination prior to exercise test:** the dog should be kept as calm as possible with gentle restraint. If the dog is stressed, please allow a period of time to calm. If the dog cannot be calmed, then the initial examination should be graded according to the post-exercise criteria. Auscultation is performed directly over the larynx from the side, avoiding any upward pressure on the pharynx and larynx. Head should be in a neutral position, not flexed.
- **Exercise test:** this is designed to keep the dog active for 3 minutes. The dog should be encouraged to trot at 4-5 miles per hour by the assessors or the owners, but not pulled on the lead. Toilet stops should be accommodated. If the dog has reasons that it cannot manage this pace (e.g osteoarthritis, obesity, anxiety), a fast walk should be attempted.
- **Examination after the exercise test:** the dog should be auscultated immediately following the exercise test.
- **Functional grading:** The clinical grading was based on respiratory signs before (pre-ET) and immediately after the exercise test (post-ET). **The highest grade from any of the three categories (respiratory noise, inspiratory effort, dyspnoea/cyanosis/syncope) should be given as the final grade.**
 - Some dogs may have quieter mouth breathing after exercise than nasal breathing prior to exercise. These are usually grade I dogs.
 - If the dog is under 12 months old when first graded, it should be re-graded after a year.

^a Respiratory noise (stertor and/or stridor) was diagnosed by pharyngolaryngeal auscultation. Mild: only audible under auscultation; moderate: intermittent audible noise that can be heard without stethoscope; severe: loud, constant audible noise that can be heard without stethoscope.

^b An abnormal respiratory cycle characterized by evidence of increased effort to inhale the air in with the use of diaphragm and/or accessory muscles of respiration and/or nasal flaring with an increase in breathing rate. Mild: minimal use of diaphragm; moderate: evidence of use of diaphragm and accessory muscles of respiration; severe: marked movement of diaphragm and accessory muscles of respiration.

^c Dogs that have had episodes of syncope and /or cyanosis as documented by owner's report are classified into Grade III without ET. Dyspnoea: irregular breathing, signs of discomfort, and laboured breathing.

^d Dogs with moderate intermittent nasal stertor when sniffing have similar BOAS index (objective respiratory function) to dogs only with mild respiratory noise, therefore, these dogs are considered Grade I
