



# Drawing the line in clinical treatment of companion animals: recommendations from an ethics working party

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Modern veterinary medicine offers numerous options for treatment and clinicians must decide on the best one to use. Interventions causing short-term harm but ultimately benefitting the animal are often justified as being in the animal's best interest. Highly invasive clinical veterinary procedures with high morbidity and low success rates may not be in the animal's best interest. A working party was set up by the European College of Veterinary Anaesthesia and Analgesia to discuss the ethics of clinical veterinary practice and improve the approach to ethically challenging clinical cases. Relevant literature was reviewed. The 'best interest principle' was translated into norms immanent to the clinic by means of the 'open question argument'. Clinical interventions with potential to cause harm need ethical justification, and suggest a comparable structure of ethical reflection to that used in the context of *in vivo* research should be applied to the clinical setting. To structure the ethical debate, pertinent questions for ethical decision-making were identified. These were incorporated into a prototype ethical tool developed to facilitate clinical ethical decision-making. The ethical question 'Where should the line on treatment be drawn' should be replaced by 'How should the line be drawn?'

## Introduction

For centuries, the need to protect and promote the health-related interests of the patient<sup>1</sup> has been the primary consideration for what is morally acceptable in human clinical practice. This overarching obligation plays a major role in the context of human medicine, understood as 'patient centred practice'. This approach is also evident in veterinary companion animal practice, where the health of the animal

patient and its best interests are the main focus.<sup>2-9</sup> This patient-centred practice is increasingly important with the changing status of animals in our societies.<sup>4 5 10 11</sup>

The aims of medical and veterinary companion animal practice are increasingly comparable,<sup>10</sup> although recent literature also identifies differences.<sup>7 10 12</sup> Companion animal practice can be considered a place where the 'best interest of the patient' is paramount and does not necessarily take into account the interests of the client or other parties.<sup>3 4 10 13 14</sup> However, this patient-centred focus is often in the interest of the client where the human-animal bond is as strong as that with a human family member.<sup>4 11 15-18</sup> Companion animals are increasingly viewed as patients whose treatment should not be limited by economic constraints.<sup>10 19</sup>

Both the client's willingness to pay for treatment and an increase in treatment options for companion animal patients raise the question of which treatments are morally justified, requiring ethical reflection and discussion.<sup>2 14 20-32</sup> In the light of the available advances in medical treatment, we must ask whether veterinary clinicians should do everything possible and if not, how should they make clinical decisions which have the potential for considerable impact on patient and client.

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In response to concerns raised by members of the Association of Veterinary Anaesthetists (AVA) (AVA General Meeting; Prague, September 2016) about apparent inappropriate overtreatment of some companion animals, the European College of Veterinary Anaesthesia and Analgesia (ECVAA) set up a working party to discuss the impact of advances in clinical veterinary techniques on veterinary ethics in companion animal practice. This paper describes the work carried out, the conclusions drawn and the recommendations made by that working party.

## Materials and methods

### Part I

A moral philosophical analysis of the companion animal clinic was explored, which included an ethical argument against the backdrop of relevant and recent literature. A literature search for publications on clinical veterinary ethics was conducted and complemented by additional referenced literature. The search included, but was not limited to, a systemic user-defined retrieval of the PubMed database, the Philosopher's Index and the Web of Science, using combinations of search terms: 'euthanasia', 'veterinary medicine', 'veterinary ethics', 'clinical ethics', 'companion animals' and 'high tech'.

Open questions were used to establish the principal moral foundations under which the veterinary clinician should work. Open questions have no set answers and allow answers expressed in the respondent's own words.

### Part II

The ECVAA working party was made up of an expert panel of six individuals: five ECVAA diplomates who work in a variety of settings including tertiary referral practice, laboratory animal practice, veterinary consultancy and academia. The sixth member of the expert panel was an ethicist specialising in the field of veterinary ethics.

The working party reflected on the issues of modern-day veterinary ethics in companion animal cases and explored options for dealing with ethically challenging cases. The process was carried out via telephone conferences, email-based electronic discussions and one face-to-face meeting.

The working party discussed themes relating to veterinary ethics, in particular identifying key stakeholders and relevant ethical considerations. These themes were reviewed by further intensive discussion and a list of core ethical problems was developed, which included motivators for selection of a preferred treatment option. The list of motivators was further discussed, differentiated and incorporated into questions aimed at facilitating ethical decision-making in companion animal cases.

**TABLE 1: Relationship between norm 1 (restoring animal's health) and norm 2 (animal's quality of life experience)**

Norm 2	Norm 1	
	Health+	Health-
Quality of life+	Treatment morally justified	Treatment may be morally justified
Quality of life-	Treatment may be morally justified	Treatment not morally justified

## Results

### Part I

Against the background of the literature search, the research question was developed:

How should the line be drawn in the companion animal clinical practice?

The line refers to the limit on intervention imposed by the amalgam of technical, ethical, humanitarian and financial considerations. By means of the open-question argument, the principal of 'in the animal's best interest' was identified as the moral foundation of companion animal practice and was translated into two norms inherent to companion animal clinical work: (1) to aim for the patient's restored health and (2) to respect the patient's quality of life (QOL) (Table 1). The open-question argument was further used to distinguish 'justification' from 'explanation' in choosing a particular treatment option, and for ethical decision-making.

### Part II

The key stakeholders affected by clinical decision-making and motivational criteria relevant to each key stakeholder were identified, as well as the relationships likely to be affected (Table 2).

Relationships were explored further and a set of analytical questions relevant to each relationship was developed. This covered the 'patient centred' justifications directed towards the 'best interest of the patient' (Table 3), emphasising animal-centred factors (questions A–D, Table 3) and secondary factors (questions

**TABLE 2: Key stakeholders and criteria to be considered in clinical veterinary ethical decision-making**

Key stakeholder	Criteria	Relationship domains
Companion animal	Patient's best interests <ul style="list-style-type: none"> <li>▶ Health prognoses (short and long term)</li> <li>▶ Experienced quality of life                             <ul style="list-style-type: none"> <li>– Positive welfare impact</li> <li>– Negative welfare impact</li> </ul> </li> </ul>	Clinician-patient Client-patient
Clinician	Evidence base for therapy Ability to carry out the procedure Animal-focused criteria <ul style="list-style-type: none"> <li>▶ Consistent with animal's interests</li> </ul> Profession-focused criteria <ul style="list-style-type: none"> <li>▶ Personal responsibility</li> <li>▶ Institutional responsibility</li> </ul> Motivation for carrying out the procedure (academic progression, financial gain, reputation)	Clinician-patient Professional responsibility
Client	Economic constraints Client compliance Client's perspective (versus professional's perspective)	Client-clinician Client-patient

Clinician-patient (clinical responsibility)	A. Legitimate aim: Is the clinical intervention in the best interest of the animal? A1. Will the proposed treatment improve the patient's health? A2. Will the proposed treatment improve the patient's quality of life (immediately/long term)?
	B. Alternative measures: Is the proposed treatment the one with the least potential to cause harm and suffering while still achieving the intended clinical goal?
	C. Reducing harm and suffering: Have measures been taken to minimise the potential for harm and suffering?
	D. Proportionality test: Do the expected benefits outweigh the potential harm and suffering inflicted on the animal or are they at least in balance?
Clinician-profession (professional responsibility)	E. Clinician experience: Does the primary clinician/team have experience in carrying out the proposed treatment and/or is it a well-documented recognised treatment?
	F. Ethical decision-making: Is this case an example of good ethical decision-making for students/trainees/colleagues?
	G. Professional justification: Would you feel comfortable justifying the proposed treatment to professional colleagues?
Client-patient	H. Treatment impact: Would proceeding with the proposed treatment have a positive impact on the owner-animal relationship?
	I. Benefit to client: Would proceeding with the proposed treatment have a positive impact on the client's quality of life and/or financial benefits (eg, the proposed treatment will allow breeding from a valuable animal)?
Clinician-client	J. Cost: Is the proposed treatment financially viable for the client?
	K. Recovery: Is the client capable of providing a suitable home environment and/or administering medication during the recovery period?
Priority of justification (moral v non-moral)	L. Moral proportionality test: Are answers to E–K more influential in your clinical decision than the A–D?

E–K, Table 3). A moral proportionality test balancing the animal-centred points against the secondary factors was incorporated to assess the relative importance of animal-centred factors versus secondary factors (question L, Table 3).

In order to come to a well-reasoned judgement whether a treatment (including euthanasia) is best (in terms of norms 1 and 2) and therefore fulfil the 'best interest of the patient' the questions behind the patient-centred factors (justifications) are entirely 'animal focussed' (norms 1 and 2). If any of the questions (Table 3, A–D) are answered negatively, the treatment option is questionable.

The secondary explanations were converted to analytical questions clustered according to the relationship domains (Table 3). Factors E–K are secondary to the clinician's responsibility if they do not refer back to the 'best interest of the patient'. The answers to all these questions can explain a clinical decision, but they do not justify it in a moral sense. Therefore, any clinical decision that is based primarily on answers to E–K without referring to A–D will be questionable. The final question (L) reflects whether a moral or non-moral justification is given.

Brought together, the analytical questions A–L made up a catalogue that provides structure for ethical reasoning and were incorporated into a prototype veterinary

ethics tool (VET) (Table 4). The VET focused on the relationships within the 'veterinary clinician-animal-client' triad. Interests of individual stakeholders were not the focus; instead questions of ethical relevance that emerged from the relationships between them were included. These relationships are of (A) clinician-animal, (B) clinician-client, (C) client-animal, and (D) clinician-other professional veterinary clinicians: professional responsibility.

## Discussion

We argue that the answer to the normative question 'Should clinicians always do what they can?' is clearly negative. First, it is (veterinary) common sense that there are 'ethical' lines which must be drawn and euthanasia is the best treatment option in particular cases,<sup>31 33</sup> even when further treatment options could be explored. Second, common sense is supported on ethical grounds. It has been argued that 'virtually every ethical view converges to agree that euthanasia is acceptable, desirable or morally required'<sup>10</sup> if an animal is experiencing severe pain and distress with no possibility of relief.<sup>5i</sup> If treatment of a suffering patient resulted in no clinical improvement or even deterioration, it would be hard to dismiss euthanasia as a treatment option in the patient's interest. However, the practical decision for or against euthanasia remains difficult. Sandøe *et al* said<sup>10</sup>:

[Euthanasia] may come in some sense either 'too soon' while an animal has a good life left to live with palliative care, or 'too late' when suffering has become intense and quality of life is very poor.

When considering the question 'How is the line drawn on treatment?' Sandøe *et al* provide recommendations for veterinary practitioners faced with ethically challenging cases in the companion animal clinic. The Aesculapian authority of veterinary practitioners, which corresponds with a number of rights not possessed by others in our society,<sup>4 34 35</sup> brings with it a duty for professionals to respond to new developments and challenges. In addition, there are key stakeholders as well as aspects of significance in the clinical context that should be considered in ethical decision-making along with the triad of 'clinician-companion animal-client' (Table 2).

## The moral infrastructure of the veterinary clinic

The veterinary clinic has a particular 'moral infrastructure', understood as the dominant moral factors which shape clinical practice. The most important factors in clinical contexts are 'health' and 'disease' which are intrinsically linked to the patient's QOL.

<sup>i</sup>In this regard, the veterinary companion animal clinic differs from the human medical clinic, since active euthanasia is a legal and morally justifiable option and is understood in line with the principle to act in the 'best interest of the patient' ('best interest of the patient'). Active euthanasia is—with some exceptions—legally not permitted in most countries.

**TABLE 4: Prototype of a veterinary ethics tool (VET) to facilitate decision-making in clinical veterinary medicine**

	Relationship	Questions to facilitate ethical deliberation	No	I don't know	Possibly	Definitely
Animal-centred factors (justificatory reasons)	Clinician-patient (clinical responsibility)	A. Do you perceive the proposed treatment to be in the best interests of the patient?	Red	Orange	Green	Green
		A1. Will the proposed treatment improve the patient's health?	Red	Orange	Green	Green
		A2. Will the proposed treatment improve the patient's quality of life:	Red	Orange	Green	Green
		(a) immediately	Red	Orange	Green	Green
	(b) long term	Red	Orange	Green	Green	
		B. Is the proposed treatment option the one with the least potential to cause harm and suffering while still achieving the intended clinical goal?	Orange	Orange	Green	Green
		C. Have measures been taken to minimise the potential for harm and suffering?	Orange	Orange	Green	Green
		D. Do the expected benefits outweigh the potential harm and suffering inflicted on the animal or are they at least in balance?	Red	Orange	Green	Green
Secondary factors (explanatory reasons)	Clinician-profession (professional responsibility)	E. Does the primary clinician/team have experience in carrying out the proposed treatment and/or is it a well-documented recognised treatment?	Orange	Orange	Green	Green
		F. Is this case an example of good ethical decision-making for students/trainees/colleagues?	Orange	Orange	Green	Green
		G. Would you feel comfortable justifying the proposed treatment to professional colleagues?	Orange	Orange	Green	Green
	Client-patient	H. Would proceeding with the proposed treatment have a positive impact on the owner-animal relationship?	Orange	Orange	Green	Green
		I. Would proceeding with the proposed treatment have a positive impact on the client's quality of life and/or financial benefits (eg, the proposed treatment will allow breeding from a valuable animal)?	Orange	Orange	Green	Green
	Clinician-client	J. Is the proposed treatment financially viable for the client?	Red	Orange	Green	Green
K. Is the client capable of providing a suitable home environment and/or administering medication during the recovery period?		Red	Orange	Green	Green	
Priority check	Professional responsibility	L. Are the secondary factors E-K (explanatory reasons) more influential in your clinical decision than the animal-centred factors A-D (justificatory reasons)?	Green	Orange	Red	Red

■ Consider alternative treatment options.  
■ Reconsider procedure and the clinician's responsibility.  
■ Valid reasons for clinical procedure.

As an illustration, radiotherapy of a dog's cutaneous tumour might cause acute radiation toxicity, resulting in tissue damage and severe pain. If 'being healthy' is equated to 'being tumour free' without considering the patient's immediate QOL, there is perfect justification for this medical intervention. However, as soon as QOL is considered as an important part of clinical decision-making, doubts about whether the treatment can be justified may emerge.<sup>11 28</sup> Intrinsic standards known as 'norms' are the underlying moral rules by which a clinic will adhere to its moral infrastructure.

Companion animal veterinary work can be distinguished from other veterinary contexts, for example, laboratory animal or farm animal practice,<sup>36</sup> because interventions on companion animals should always be in the 'best interest of the patient'. In contrast, interventions in laboratory animal and farm animal practice are for the benefit of individuals and societies other than the animals themselves. Hence, companion animal clinical practice is 'patient centred'. However, treatment in the 'best interest of the patient' may cause harm in order to restore or maintain the patient's health. For instance, surgical treatment of a brachycephalic dog with severe breathing problems can easily be justified because of the anticipated improvement to the dog's ability to breath.

In some circumstances, however, there may be doubt about whether the patient's interest is the driving force in decision-making. Other possible motivations to carry out medical or surgical procedures can include: (A) professional advancement for the clinician; (B) financial gain for the practice or clinic; (C) training opportunity for less experienced clinicians; and (D) to meet (potentially) unrealistic expectations of the client (with no positive prospect for the animal). These motivations lack potential to justify procedures that may cause harm to patients. Their lack of justifying power is due to the major moral narrative or 'moral infrastructure' inherent to the clinic, that is, the 'best interest of the patient'. To illustrate this point, imagine the primary clinician in charge uses professional advancement or the financial gain of the clinic in order to justify performing surgery on a patient. Both reasons would explain why the clinician performs the surgery but neither can be accepted as a moral justification.

The difference between justification in the moral sense and explanations, which are not justifications, refers back to the very concept of morals and moral epistemology. Morality deals with values, norms and principles that are ultimately binding. Explanations simply describe or even give an excuse for an action taken. If a moral principle is referred to, this principle serves as a 'regress stopper' of infinite regress. To illustrate this

point in a clinical context: if a clinician is asked: 'Why are you carrying out the surgery?' and the answer is 'because it is my job', the question 'but is it right to do your job?' still makes perfect sense. If the answer is 'because I aim to serve the best interest of the dog', the question 'but is it right to serve the best interest of the dog?' would be followed by a clear 'yes', which indicates the self-evident normative basis which is ultimately binding for the clinician.

The legitimacy of the 'best interest of the patient' concept can also be questioned by moral philosophy, but for the purposes of this discussion 'best interest of the patient' is assumed as an inherent moral principle of the companion animal clinic. This can be summarised by the concept of the 'open question argument', originally introduced by GE Moore.<sup>37</sup> To lay open what has been called 'regress stoppers' (core moral beliefs), asking 'but is it right?' can serve as an easy method to distinguish moral reasons from other factors.

### Justification: patients in the centre of clinical decisions

The companion animal clinic is considered a place where the primary justification for carrying out treatment is ensuring patients are cared for in their best interests. In this context, all other justifications for treatment are considered secondary motivators and lack moral justification. However, if veterinarians always acted solely in the best interest of companion animals then no moral justification would be needed and ethical conflict would not occur. Indeed, clinical interventions which do not induce harm have no need to be justified; however, such procedures are rare, hence it is important to clarify possible lines of justification which refer to the 'best interest of the patient'.<sup>38 39</sup> In human medicine, the principles of patient benefit (act in the patient's best interest) and 'do no harm' obligate the physician to seek the balance in favour of potential benefit to the patient over potential harm.<sup>1</sup> This approach runs parallel to the veterinary companion animal practice. Therefore, the clinical perspective on interventions with potential to benefit or harm the patient has to be balanced with the perspective of the patients themselves. Naturally, the patient's health (and overcoming disease) is to be considered a benefit.

#### Norm 1: the veterinary clinician should aim for the patient's health

Aiming for the patient's health often goes in parallel with its best interest; however, harm that may be caused by a clinical procedure may have negative effects on the QOL. Such negative effects need justification. Therefore, considering norm 1 in clinical decision-making is necessary but not sufficient. Clinical procedures should only be carried out if the patient's experienced benefits (in terms of QOL) outweigh the harms (in terms of QOL). Accordingly, the 'best interest

of the patient' cannot be reduced to 'health only' but covers also the patient's perspective expressed via its QOL. Consequently, a second norm is required, a significant part of the clinic's moral infrastructure.

#### Norm 2: the veterinary clinician should aim for a positive balance of the patient's QOL

If a clinical procedure is unlikely to provide either health or QOL benefit, the procedure lacks justification since the harm done in the clinical procedure is not in the best interest of the animal. Therefore, harm done in the clinic without realistic expectation to restore health (norm 1) or achieve long-term benefits in QOL (norm 2) is not justified. If health is restored (norm 1) and QOL decreases (norm 2), the justification of the clinical procedure becomes more difficult (Table 1). Innovative techniques and aggressive treatment that use all measures possible in the companion animal clinic are particularly at risk of falling into this category.

The inherent moral infrastructure of the companion animal clinic provides 'justifications' (which refer to norms 1 and 2) and 'explanations'. The two categories (justification and explanation) can be distinguished via the 'open question argument' introduced above. Whereas justifications in a moral sense function as 'regress stoppers', explanations do not function in that way since they are not ultimately binding. Therefore, explanations are best termed 'moral pragmatic' considerations.<sup>40 41</sup> These considerations influence the treatment decision via contextualisation integrated with aspects of the prevailing situation. For instance, if the explanation for a clinical decision depends on an client's unwillingness to pay for an alternative treatment,<sup>19</sup> the open question remains: 'but is it in the best interest of the patient?' If the answer is not 'yes', the moral justification of the decision becomes questionable.

These secondary normative (but not moral) aspects become a problem if they over-ride the justifications or make it questionable whether norms 1 and 2 are applied adequately.<sup>11</sup> When motivation for treatment is based primarily on secondary explanations, a 'grey area' opens up, at risk of being questioned and criticised. It is essential to identify criteria to structure and facilitate decision-making to avoid treatment decisions falling into this 'grey area'. It is important to recognise the complexity of the clinical setting, and appreciate why decisions are not necessarily solely in the 'best interest of the patient'. Table 3 structures the key stakeholders and criteria in order to culminate in the clinician's decision on treatment option. This links to the relationship domains of the clinician-patient-client triad which structures the professional responsibility identified in Table 2.

The core justification of clinical intervention lies in the principle of the 'best interest of the patient'. However, other aspects, although of secondary or limiting nature in the clinic, are nevertheless, important moral

and pragmatic aspects, which reflect on the clinician's responsibility. These issues can be turned into a set of analytical questions regarding the responsibility relationships in the clinician-patient-client triad. Moral justification is eroded whenever these secondary aspects become dominant and determine a clinical decision, which contradicts the 'best interest of the patient'. It is the clinician's responsibility to determine the extent to which the secondary factors play a role in the decision-making. Professionals cannot and should not be relieved of this responsibility. Although 'moral stress'<sup>11 42</sup> is likely, we argue that facing this moral stress is inherent to the professional's responsibility. Only one clear line can be drawn: the secondary factors in clinical decision-making must not contradict the 'best interest of the patient', otherwise the clinical decision loses its moral justification and gains, for example, an economic one.

The suggested way to incorporate such ethical reasoning is in an 'ethical tool',<sup>43-45</sup> incorporating the key stakeholders and criteria into a guiding framework. This approach led to development of the VET. The working party followed the steps applied to the ethical evaluation procedure in animal research, an idea used recently by Yeates in this context.<sup>20</sup> The main aspects of project evaluation in animal research are to: (A) identify a legitimate aim of the research, (B) check for alternatives, (C) reduce harm and suffering (3Rs principle), and (D) undertake a harm-benefit analysis (for greater detail see Directive 2010/63/EU).<sup>46 47</sup> In parallel with the structure of ethical justifications in animal research, corresponding questions were formulated according to the previously identified relationship domains. The VET allows for identification and collation of justifications and explanations in favour of or against a particular treatment option, and is divided into animal-centred factors and secondary factors.

The VET should provide a framework to encourage clinicians to promote methodical clinical ethical decision-making. Importantly, the VET also provides a way of improving awareness of ethics and may facilitate discussion among clinical staff, especially in multidisciplinary settings, where ethical decision-making often falls to the primary clinician with varying input from other members of the team. It should be noted that the VET does not indicate 'right' or 'wrong' and the main function of the VET is in promoting and structuring discussion of all relevant aspects of clinical veterinary ethics and facilitating ethical decision-making

A multicentre study to assess VET is in development and institutional ethical approval has been granted to investigate the usefulness of the VET in the clinical setting. Future work should provide guidance regarding when VET should be employed and which stakeholders should be involved in ethical discussion of companion animal cases.

## Conclusion

In modern veterinary medicine where treatment options are numerous, veterinary clinicians of all specialties are confronted with the need to make responsible and ethical therapeutic decisions. The question regarding 'when to draw the line on treatment?' in companion animal practice is not as much a question of 'where should I draw the line?' but also 'how do I draw the line?'. We identified moral and other normative factors inherent to the clinic, which are either of justificatory or explanatory power in clinical decisions. Clinical treatment inherently harms patients in order to improve their health-related interests. This harm has to be justified with realistic expectations regarding the patient's health (norm 1) and QOL (norm 2). The two moral norms translate the best interest principle to guide and justify clinical decision-making in a moral sense. Besides justifications, we identified explanations which lack the justificatory power, but contextualise clinical decisions. Explanations influence, but should not have priority in clinical decision-making since the justifications are more important. The motivators of clinical decision-making were transformed into analytical questions which should be used in real life when difficult clinical decisions are required. A prototype of an veterinary ethical tool (VET) was developed from these analytical questions that allows identification and collation of factors that speak in favour of or against particular treatment options. This ethical tool does not say where the line is drawn, but aims to give practical help in enabling professionals to take a sound approach on how to draw the line on treatment in companion animal practice.

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## References

- 1 CHERVENAK FA, MCCULLOUGH LB. The fetus as a patient: an essential ethical concept for maternal-fetal medicine. *J Matern Fetal Med* 1996;5:115-9.
- 2 MAIN DC. Offering the best to patients: ethical issues associated with the provision of veterinary services. *Vet Rec* 2006;158:62-6.
- 3 YEATES J. Patients. YEATES J, ed. *Animal Welfare in Veterinary Practice*: Wiley Blackwell, 2013a:1-9.
- 4 ROLLIN BE. An introduction to veterinary medical ethics. Theory and cases. Second Edition. Ames, Iowa: Blackwell Publishing, 2006.
- 5 ROLLIN BE. Euthanasia and quality of life. *J Am Vet Med Assoc* 2006;228:1014-6.
- 6 GARDINER A. The animal as surgical patient: a historical perspective in the 20th century. *Hist Philos Life Sci* 2009;31:355-76.

- 7 WEICH K, GRIMM H. Meeting the Patient's Interest in Veterinary Clinics. Ethical Dimensions of the 21st Century Animal Patient. *Food Ethics* 2017;229.
- 8 GRIMM H, HUTH M. One health, many patients? a short theory on what makes an animal a patient. JENSEN-JAROLIM E, Comparative medicine. Disorders linking humans with their animals. Cham, Switzerland: Springer Nature, 2017:219–30.
- 9 BVA. Vets speaking up for animal welfare: BVA animal welfare strategy. London, 2016.
- 10 SANDØE P, CORR S, PALMER C, *et al*. The development and role of the veterinary and other professions in relation to companion animals'. In: SANDØE P, CORR S, PALMER C, Companion animal ethics: Wiley publications, 2016:24–40.
- 11 ROLLIN BE. Euthanasia, moral stress, and chronic illness in veterinary medicine. *Vet Clin North Am Small Anim Pract* 2011;41:651–9.
- 12 ASHALL V, MILLAR KM, HOBSON-WEST P. Informed consent in veterinary medicine: Ethical implications for the profession and the animal 'patient'. *Food Ethics* 2017;37.
- 13 YEATES J, EVERITT S, INNES JF, *et al*. Ethical and evidential considerations on the use of novel therapies in veterinary practice. *J Small Anim Pract* 2013;54:119–23.
- 14 YEATES J. The ethics of influencing clients. *Journal of Am Vet. Med Assoc* 2010;3:263–7.
- 15 GREENEBAUM J. It's a dog's life: elevating status from pet to "fur baby" at yappy hour. *Society & Animals* 2004;12:117–35.
- 16 HENS K. Ethical responsibilities towards dogs: An inquiry into the dog– human relationship. *Journal of Agricultural and Environmental Ethics* 2009;22:3–14.
- 17 POWER E. Furry families: making a human–dog family through home. *Soc Cult Geogr* 2008;9:535–55.
- 18 WALSH F. Human–animal bonds II: the role of pets in family systems and family therapy. *Fam Process* 2009;48:481–99.
- 19 KONDRUP SV, ANHØJ KP, RØDSGAARD-ROSENBECK C, *et al*. Veterinarian's dilemma: a study of how Danish small animal practitioners handle financially limited clients. *Vet Rec* 2016;179:596.
- 20 YEATES JW. Ethical principles for novel therapies in veterinary practice. *J Small Anim Pract* 2016;57:67–73.
- 21 KNESL O, HART BL, FINE AH, *et al*. Veterinarians and Humane Endings: When Is It the Right Time to Euthanize a Companion Animal? *Front Vet Sci* 2017;4.
- 22 KUNZMANN P. Ethik und Moral in der Veterinärmedizin. *veterinärSPIEGEL* 2014;4:187–9.
- 23 RCVS. Ethics review panel. 2016 <https://www.rcvs.org.uk/about-us/committees/ethics-review-panel/>
- 24 JARVIS S. Where do you draw the line on treatment? *Vet Rec* 2010;167:636–7.
- 25 SPRINGER S, GRIMM H. Hightech-tiermedizin: eine herausforderung für die professionseigene moral? *Tierärztliche Umschau* 2017;72:280–6.
- 26 TANNENBAUM J. Veterinary ethics: animal welfare, client relations, competition and collegiality. 2<sup>nd</sup> edn. St. Louis (MO): Mosby-Year Book, 1995a.
- 27 TANNENBAUM J. Ethical Challenges of High-tech, Innovative, and Academic Veterinary Medicine. TANNENBAUM J, Veterinary Ethics: Animal Welfare, Client Relations, Competition and Collegiality: Mosby Publishers, 1995b:375–407.
- 28 ROLLIN BE. Veterinary medical ethics. An ethicist's commentary on prolonging the life of cancer patient. *Can Vet J* 2012;53:1154–5.
- 29 RIPPE KP. [Therapy or euthanasia? How far may (and should) the veterinarian go in the treatment of an animal?]. *Schweiz Arch Tierheilkd* 1998;140:143–8.
- 30 KIMERA S. I, MLANGWA JED. ten Have, Henk Encyclopedia of Global Bioethics. *Veterinary Ethics* 2016:2937–53.
- 31 MULLAN S, FAWCETT A. Veterinary Ethics: Navigating Tough Cases. 5m publishing. Sheffield 2017.
- 32 STREINER DL, NORMAN GR. Health measurement scales: a practical guide to their development and use. 4<sup>th</sup> edn: Oxford University Press, 2008.
- 33 HARTNACK S, SPRINGER S, PITTAVINO M, *et al*. Attitudes of Austrian veterinarians towards euthanasia in small animal practice: impacts of age and gender on views on euthanasia. *BMC Vet Res* 2016;12:26.
- 34 ROLLIN BE. The use and abuse of Asculapian authority in veterinary medicine. *J Am Vet Med Assoc* 2002;220:1144–9.
- 35 MAY SA. Veterinary Ethics, Professionalism and Society. Wathes, Ch.M./Corr, S.A./May, S.A./McCulloch, St.P./Whiting M.C. (eds). Veterinary & animal ethics. Proceedings of the first international conference on veterinary and animal ethics, September, 2011: Wiley-Blackwell, 2012.
- 36 NIEMI SM. Laboratory animals as veterinary patients. *J Am Vet Med Assoc* 2013;242:1063–5.
- 37 BALDWIN T. ZALTA EN, George edward moore, the stanford encyclopedia of philosophy. Summer 2010 Edition, 2010. <https://plato.stanford.edu/archives/sum2010/entries/moore/>
- 38 FORDYCE PS. Welfare, law and ethics in the veterinary intensive care unit. *Vet Anaesth Analg* 2017;44:203–11.
- 39 FOURNIER V. Clinical ethics: methods. *Ed. ten Have, Henk Encyclopedia of Global Bioethics* 2016:553–62.
- 40 KAMINSKY C. Moral für die politik. Eine konzeptionelle grundlegung angewandter ethik. Paderborn, 2005.
- 41 GRIMM H. Das moralphilosophische experiment. John deweys theorie empirischer forschung als methode der anwendungsorientierten tierethik: Tübingen, 2010.
- 42 BATCHELOR CE, MCKEEGAN DE. Survey of the frequency and perceived stressfulness of ethical dilemmas encountered in UK veterinary practice. *Vet Rec* 2012;170:19.
- 43 BEEKMAN V, DE BAKKER E, BARANZKE H, *et al*. Ethical biotechnology assessment tools for agriculture and food production, final report ethical Bio-TA Tools QLG6-CT-2002-02594: Den Haag, 2006. [www.ethicaltools.info](http://www.ethicaltools.info).
- 44 BEEKMAN V, BROM FWA. Ethical Tools to Support Systematic Public Deliberations about the Ethical Aspects of Agricultural Biotechnologies. *J Agricultural and Environ Ethics* 2007;20:3–12.
- 45 GRIMM H. Ethik-Tool. In: FERRARI A, PETRUS K, Lexikon der Mensch-Tier-Beziehungen. Bielefeld: Transcript, 2015:94–7.
- 46 DIRECTIVE 2010/63/EU. Directive 2010/63/EU of the European Parliament and of the Council of 22 September 2010 on the protection of animals used for scientific purposes. <http://eurlex.europa.eu/LexUriServ/LexUriServ.do?uri=L:2010:276:0033:0079:en:PDF> (accessed 20 Dec 2016).
- 47 RUSSELL WMS, BURCH RL. The principles of humane experimental technique. London, 1959:195.

