



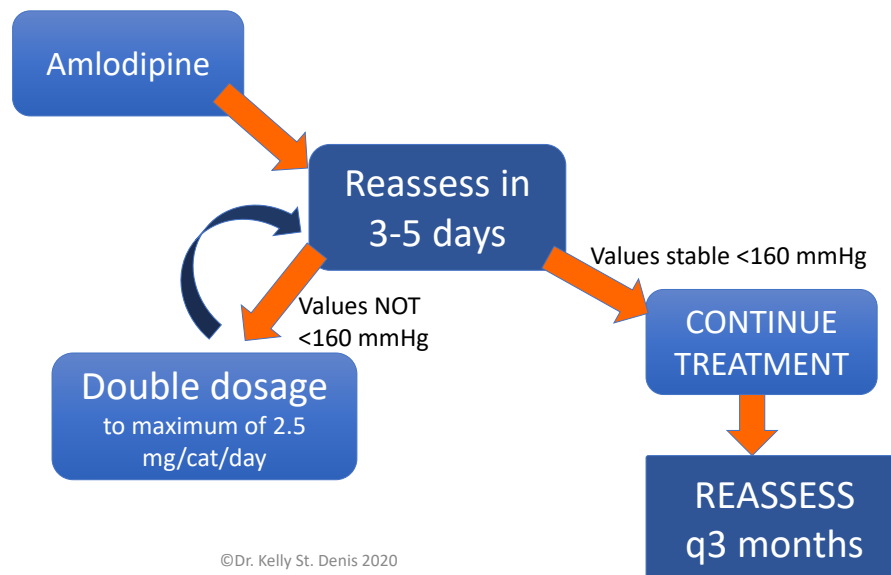
## Treatment

### Goals of Treatment

1. TOD: decrease risk, reverse damage (if possible)
2. Improve or maintain health of cat
3. In cases of secondary hypertension, treat primary disease
4. Target  $\leq 150$ -160 mmHg SBP
  1. Investigate other potential causes of TOD
  2. Monitor BP and clinical response to antihypertensive therapy carefully
  3. Perform medication withdrawal trial once stable if there is any uncertainty about hypertension diagnosis

### Amlodipine Besylate

- Calcium channel blocker
- Potent peripheral arterial dilator
- Dosage: 0.625-1.25 mg/cat PO q24h
- Dosage: 0.125-0.25 mg/kg PO q24h
- **Rapid mode of action: reassess in 3-5 days**



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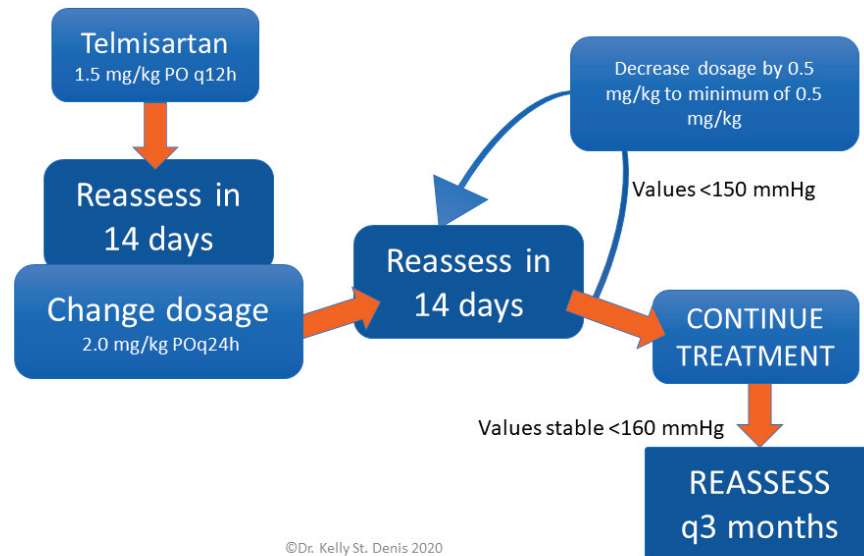
### • Troubleshooting partially or uncontrollable hypertension with amlodipine:

- Assess compliance
- Review dosage - maximum 2.5 mg/cat q24h
- May require additional medications (0%-40% patients):
  - Telmisartan – Dosage: 1.0 mg/kg PO q24h
  - Benazepril – Dosage: 0.5-1.0 mg/kg PO q24h
  - Atenolol
- Consider possible PHA

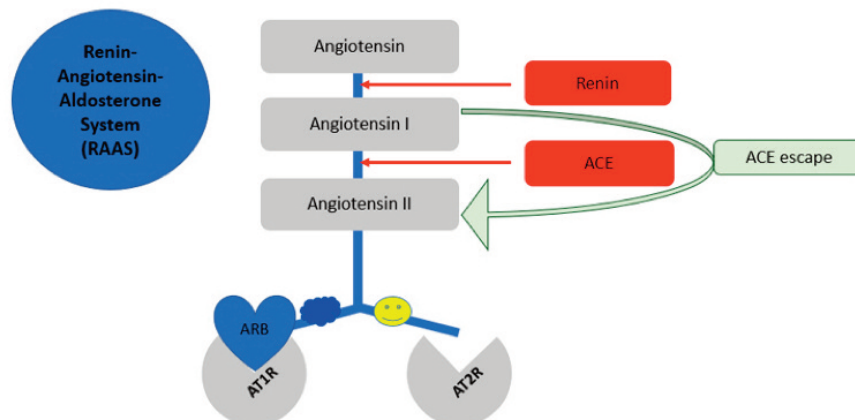
### Treatment continued

#### Telmisartan

- ARB
- In Canada: licensed for the reduction of proteinuria associated with CKD in cats
- In the USA: licensed for the treatment of feline hypertension
- Dosage: 1.5 mg/kg PO q12h 14d then 2.0 mg/kg PO q24h long term
- Reduce dosage in 0.5 mg/kg dose increments to a minimum of 0.5 mg/kg
- **Timing for rechecks will vary with the individual patient**
- **Administered directly into the mouth, or next to or on top of a small amount of food. Do not mix into a full meal in case the patient does not finish the meal**



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#### Undesirable Effects

- Vasoconstriction
- Aldosterone release
- Sodium and water retention
- Sympathetic activation
- Fibrosis
- Glomerular hypertrophy

#### Desirable Effects

- Vasodilation
- Sodium and water excretion
- Tissue regeneration
- Inhibiting inappropriate cell growth

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### Treatment continued

#### ACE Inhibitors: Benazepril, Enalapril, Ramipril

- Insignificant impact on hypertension and therefore **should not be used as primary drug or alone as a treatment for systemic hypertension**
- May be beneficial as an adjunct to refractory treatment with amlodipine
- Do not add if patient is dehydrated
- Benazepril – Dosage: 0.5-1.0 mg/kg PO q24h

#### $\beta$ -Blocker: Atenolol

- Indicated in some cases with tachycardia or hyperthyroidism
- Dosage: 1.0-2.0 mg/kg PO q12h

#### Spironolactone

- Indicated in refractory hypertension secondary to hyperaldosteronism
- Mode of action: Aldosterone antagonist
- Dosage: 1.0-2.0 mg/kg PO q12h