Condition	Description	Clinical signs	Diagnosis	Treatment
Ectoparasites	▪ multiple species known to infect ▪ species of most concern is *Demodex merioni* ▪ often seen with an underlying immunosuppression	▪ alopecia, pruritus, dermatitis, hyperpigmentation	▪ microscopy of deep skin scrapes	▪ treat underlying immunosuppression and prevent stress ▪ ivermectin at 0.2mg/kg SC or topically every seven days for three doses ▪ extended until skin scrapes are negative ▪ treat in-contact animals
Dermatomycosis	▪ typically caused by *Trichophyton microsporum*; however, infections with *Microsporum gypseum* are possible ▪ subclinical carriers possible ▪ immunosuppression or stress predisposes ▪ zoonotic and highly contagious.	▪ pruritic circular lesions; but can also be irregular or diffuse ▪ alopecia, scaling, crusting of head, ears, back and limbs ▪ hairs may appear broken	▪ dermatophyte cultures of hair plucks ▪ microscopy of hair plucks	▪ topical antifungals, such as miconazole, if there are single lesions. However, there rarely are, so systemic antifungals such as itraconazole should be used at 2.5-10 mg/kg p.o. q24 for two weeks post resolution of clinical signs ▪ in-contact animals should be treated ▪ causes of immunosuppression investigated ▪ thoroughly clean environment
Nasal dermatitis	▪ seen mostly in grouped and stressed animals, or if the humidity >50% (Hoppmann and Barron, 2007) ▪ porphyrin secretion and subsequent *Staphylococcus* and *Streptococcus* infections are possible causes (Hoppmann and Barron, 2007)	▪ erythematous and crusting lesions around the nares and upper labial region ▪ can progress to severe moist dermatitis, ulceration and sinusitis	▪ culture and sensitivity ▪ husbandry, clinical signs and history	▪ husbandry review/remove sources of stress ▪ clean with antiseptic solution ▪ topical and systemic antibiotics based on culture and sensitivity results ▪ Elizabethan collar to stop the scratching
Diarrhoea	▪ multiple causes from environmental stressors, to dietary issues (too many vegetables) to bacterial infections such as *Clostridium piloforme* (Tyzzer's disease)	▪ loose, discoloured faeces ▪ dehydration ▪ collapse	▪ faecal cultures ▪ clinical signs and history	▪ environmental disinfection improve diet, rehydrate ▪ antibiotics based on cultures ▪ probiotics ▪ quarantine sick individuals ▪ some causes can be zoonotic
Respiratory disease (Figure 1)	▪ large number of possible causes – viral, bacterial, mycoplasmal, fungal and allergic disease (Kling, 2011)	▪ increased respiratory rate, effort and/or noise ▪ nasal discharge ▪ can progress to ear disease and subsequent circling	▪ clinical signs ▪ imaging ▪ nasal flushing, culture and sensitivity, PCR testing	▪ broad spectrum antibiotics, ideally based on culture results ▪ F10 nebulisation ▪ anti-inflammatories ▪ husbandry review
Tail slip/ autoamputation	▪ caused by incorrect handling – the skin can tear resulting in a degloving injury. This causes necrosis of underlying tissues and eventual loss of the tail	▪ traumatic lesions to the tail	▪ clinical signs and history	▪ amputation ▪ analgesia ▪ antibiosis

Table 1. Common infectious conditions seen in gerbils – a short description, the clinical signs observed, diagnosis and treatment >>