Contents

Abbreviations		6
Chapter 1.	General Introduction	
1.1	Classification and characteristics	10
1.2	Epidemiology and clinical manifestations	11
1.3	Immunity to hRSV	12
	1.3.1 Innate immunity	12
	1.3.2 Adaptive immunity	13
	1.3.2.1 Humoral immune response to hRSV	13
	1.3.2.2 Cellular immune response to hRSV	14
	1.3.2.3 Mucosal immunity	15
1.4	hRSV pathogenesis and immunopathogenesis	15
	1.4.1 Specific immune response in infants	
	with hRSV bronchiolitis	16
	1.4.2 A role for hRSV in the development	
	of asthma of allergy?	16
	1.4.3 hRSV vaccine-mediated enhanced disease	
	in infants	16
	1.4.4 hRSV vaccine-mediated enhanced disease	
	in laboratory animals	17
1.5	hRSV vaccine development	18
	1.5.1 Subunit vaccine BBG2Na	19
	1.5.2 MVA as a vector for hRSV gene delivery	19
1.6	Animal models in RSV research	19
	1.6.1 Mice	20
	1.6.2 Cotton rats	20
	1.6.3 bRSV infection in calves	20
	1.6.4 Non-human primates	21
1.7	Outline of this thesis	21

Chapter 2. <u>hRSV-specific immune responses in infants</u>

Moderate local and systemic respiratory syncytial virus-
specific T cell responses upon mild or subclinical
infection. J Med Virol 2003 70:309-1823