Cost effectiveness of RSVIG therapy questioned

The lack of adequate data on the safety, efficacy and cost of respiratory syncytial virus immune globulin [RSVIG; 'RespiGam'] has led researchers from St Vincent Medical Center in Toledo, US, to question the cost effectiveness of the drug.*

They conducted a cost-effectiveness analysis of RSVIG based on efficacy data from the PREVENT trial** and costs of $US699.50 per 2.5g vial of 'RespiGam' and $US234.50 per IV infusion as charged at a large, urban teaching hospital. They calculated that monthly treatment with RSVIG 750 mg/kg/infusion through the RSV season would cost $US5604, $US9801 and $US13 998 for an infant weighing 3.3, 6.6 and 10.0kg, respectively. The costs associated with preventing RSV-related hospitalisations among infants with these 3 body weights are shown in the table.

Cost ($US) of preventing RSV-related hospitalisation*

Cost-effectiveness parameter	Infants body weight (kg)		
	3.3	6.6	10.0
Cost of preventing one RSV admission:			
	102 608	179 505	256 373
Cost of preventing one RSV hospital day:			
	8121	14 204	20 287
Cost of preventing one RSV hospital day with supplemental oxygen:			
	10 988	19 218	27 447

* These calculations did not include the additional costs associated with use of the hospital room, skilled nursing services (e.g. oxygen saturation monitoring), physicians' services, the treatment of RSVIG infusion-related complications, screening for immunoglobulin A deficiency, and additional doses of various vaccines.

'Despite its high cost, does RSV-IGIV save lives or prevent serious complications?', ask the researchers. They think not, particularly as the PREVENT trial did not reveal a significant difference between the RSVIG and control groups in terms of the rate of RSV-related intensive care unit (ICU) admission, the number of RSV-related ICU days per 100 children, the rate of RSV-related mechanical ventilation, and RSV-related ventilator days per 100 children.

They also point out that the prophylactic or therapeutic efficacy of RSVIG in immunocompromised children or in hospitalised high-risk infants with nosocomial RSV infection has not been proven, and that the drug can cause adverse reactions, such as fluid overload and respiratory failure.

** see also PharmacoEconomics & Outcomes News 124: 8, 9 Aug 1997; 800539932*

*** Prophylaxis of Respiratory Syncytial Virus in Elevated-risk Neonates Trial; see PharmacoEconomics & Outcomes News 99: 9, 15 Feb 1997; 800458372*

Thakur BK, Wu LR, Schaeufele JF, et al. RSV-IGIV therapy: a cost/benefit analysis. Pediatrics 100: 417, Sep 1997 800613784