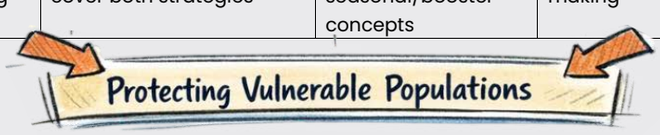
GLOBAL HEALTH PRESS

KEY CHARACTERISTICS OF LICENSED RSV IMMUNIZATION PRODUCTS

Feature	Arexvy (GSK)	Abrysvo (Pfizer)	mRESVIA (Moderna)	Nirsevimab (Sanofi/AstraZeneca, Beyfortus)
Type	Vaccine	Vaccine	Vaccine	Long-acting monoclonal antibody
Platform & antigen	Recombinant stabilized preF RSV F protein (RSV A) with **AS01E adjuvant**	Bivalent recombinant stabilized preF F protein (RSV A + RSV B), **non-adjuvanted**	mRNA encoding stabilized preF F (RSV A and B) in **lipid nanoparticles**	Human IgG1 monoclonal antibody targeting a conserved preF F-epitope with extended half-life modifications
Main indication	Prevention of RSV-LRTD in **adults ≥60 years** (some countries ≥50 years at risk)	Prevention of RSV-LRTD in **adults ≥60** years and for **vaccination in pregnancy** (ViP) to protect infants	Prevention of RSV-LRTD in **adults ≥60 years**; in some regions also **high-risk adults 18–59 years**	Prevention of RSV-LRTD in infants: **all infants** entering first RSV season and selected high-**risk infants/young children entering a second season**
Dose & schedule	Single 0.5 mL IM dose; boosters under study, not routinely recommended	Single 0.5 mL IM dose for older adults; single dose in late pregnancy for maternal use	Single IM dose; booster strategies under evaluation	Single IM injection before/on entering RSV season; weight-based (e.g. 50 mg <5 kg, 100 mg ≥5 kg); repeat dose in second season for defined high-risk groups
First-season efficacy / effectiveness	≈83% VE vs RSV-LRTD; ≈94% vs severe RSV-LRTD in adults ≥60 years	≈67–82% VE vs RSV-LRTD depending on symptom definition; high protection vs severe LRTD	≈84% VE vs RSV-LRTD with ≥2 symptoms; ≈82% with ≥3 symptoms	≈70–80% efficacy vs medically attended RSV-LRTI and hospitalization in infants across trials; strong real-world protection in first season
Multi-season durability	Protection persists but wanes over 3 seasons: cumulative VE ≈60–65% vs RSV-LRTD	Sustained high VE (~80%) documented over 2 seasons: limited data beyond 2 seasons	VE declines from ~80%+ to ~50% by ~18 months; long-term data still accruing	Designed for one RSV season per dose: high antibody levels for ~5–6 months
Real-world effectiveness	≈60–65% VE vs RSV hospitalization over 2 seasons; similar to Abrysvo	≈60–80% VE vs RSV hospitalization/ED visits in older adults over 2 seasons	Early effectiveness estimates consistent with trial VE; fewer data so far	Multiple studies show >70% effectiveness vs RSV hospitalization and medically attended LRTI in infants
Reactogenicity	Local pain, fatigue, myalgia common; somewhat higher systemic reactions due to AS01E; serious AEs similar to placebo	Mostly mild–moderate local/systemic reactions (pain, fatigue, headache); serious AEs comparable to placebo	Typical mRNA-vaccine profile (pain, fatigue, myalgia, headache); serious AEs similar to placebo	Generally well tolerated; injection-site reactions and mild systemic symptoms (fever, irritability) most common; serious AEs and hypersensitivity rare
Special safety notes	Very rare immune-mediated/neurologic events under surveillance (e.g., GBS signals)	Ongoing surveillance for rare neurologic/cardio-vascular events; no consistent major signal to date	Ongoing monitoring for rare serious AEs typical of new mRNA products	Safety in preterm and high-risk infants specifically evaluated; overall strong benefit–risk balance
Approximate cost (Germany/EU, list)	~€210–230 per adult dose	~€210–230 per adult or maternal dose	Likely similar or slightly higher than other RSV vaccines; official list prices still emerging	Initially ~€1,300 per dose, reduced to ~€450; annual treatment costs per patient roughly in the high hundreds of euros before rebates
Programmatic role	Core option for older-adult vaccination (≥60) and some high-risk groups, with strong 3-season data	Dual role in older adults and pregnancy immunization; attractive where one product can cover both strategies	Alternative older-adult option using mRNA technology; potentially suited to seasonal/booster concepts	Cornerstone of infant RSV prevention in many high-income settings; complements or substitutes maternal vaccination depending on national policy and shared decision-making



References

1. Schmitt HJ, Hrynkevych K. **Respiratory syncytial virus (RSV) diseases**. In: *VacciTutor*. Chapter 60. Singapore: Global Health Press; 2026.