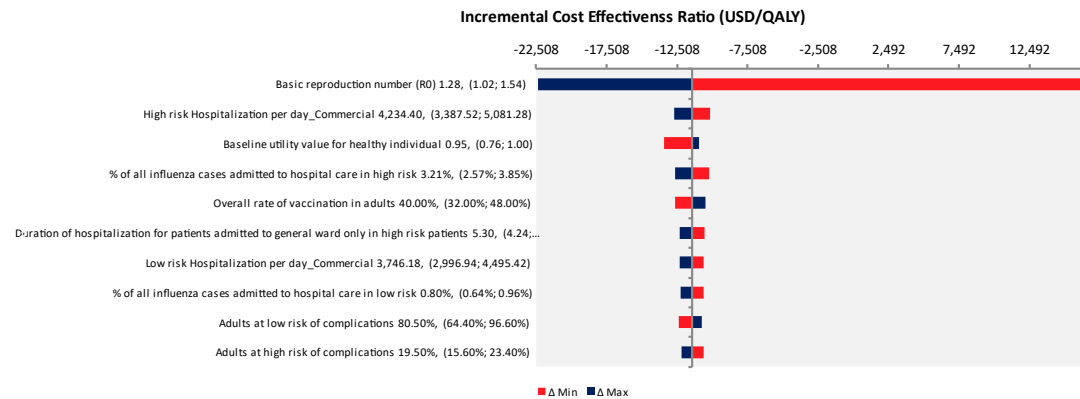


Supplementary Information

A.



B.

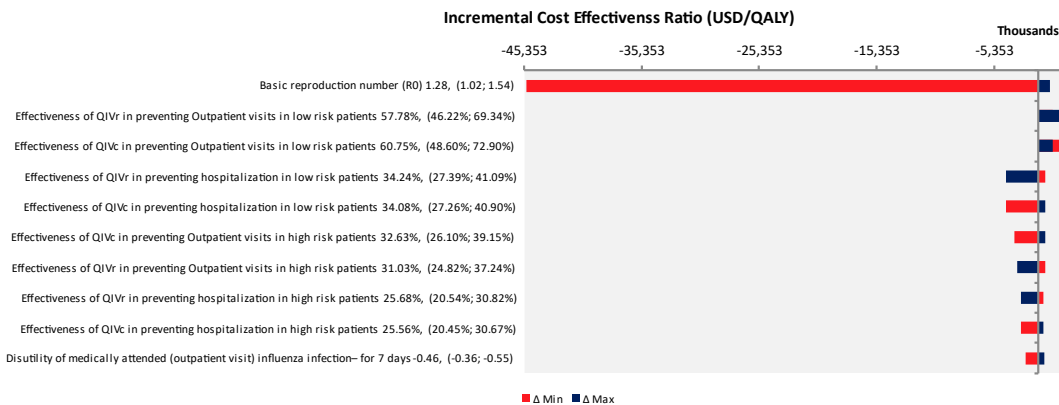


Figure S1: One-way sensitivity analysis tornado diagram for base case analysis (season 2018-2019) for cell-based vaccine versus (A) no vaccine and (B) recombinant vaccine from the US commercial perspective.

Table S1: Contact matrix between age groups (Mossong 2008)^[20]

	Age 0-19	Age 20-64	Age 65+
Source case: Age 0-19	41.2%	53.4%	5.3%
Source case: Age 20-64	14.7%	78.4%	6.9%
Source case: Age 65+	12.1%	62.7%	25.2%

Table S2: Influenza-related medical encounter visits/admissions averted by cell-based and recombinant vaccines compared to no vaccination (season 2018-2019).

	Cell-based vaccine	Recombinant vaccine	Difference cell-based vs. recombinant
Outpatient clinic visits averted	-26,993,917	-26,558,981	-434,936
ED visit averted	-1,758,548	-1,761,064	2,516
Hospitalizations averted	-707,214	-707,920	705

Table S3: Cost-effectiveness results for scenario analyses from US commercial payer perspective (season 2018-2019)

	Cell-based vs. no vaccine	Recombinant vs. no vaccine	Cell-based vs. recombinant vaccine
Scenario 1: 10-year time horizon			
Cost of vaccines and administration	\$5.026 B	\$7.850 B	-\$2.824 B
OP visits costs	-\$2.891 B	-\$2.844 B	-\$46.582 M
ED visits costs	-\$3.288 B	-\$3.293 B	\$4.705 M

Total hospitalizations costs	-\$13.083 B	-\$13.096 B	\$12.695 M
Long term sequelae	-\$0.964 B	-\$0.965 B	\$0.870 M
Total Cost	-\$15.201 B	-\$12.349 B	-\$2.852 B
Total QALYs	1,899,410	1,897,620	1,789
ICER (\$/QALY)	Dominant	Dominant	Dominant
Scenario 2: Vaccine effectiveness estimates from 2019-2020 season			
Cost of vaccines and administration	\$5.026 B	\$7.850 B	-\$2.824 B
OP visits costs	-\$2.870 B	-\$2.861 B	-\$8.469 M
ED visits costs	-\$3.291 B	-\$3.312 B	\$20.704 M
Total hospitalizations costs	-\$13.154 B	-\$13.149 B	-\$5.078 M
Total Cost (US\$)	-\$14.289 B	-\$11.473 B	-\$2.817 B
Total QALYs	1,244,323	1,244,009	314
ICER (\$/QALY)	Dominant	Dominant	Dominant
Scenario 3a: Cost-effectiveness results in adults at low risk of developing complications			
Cost of vaccines and administration	4.046 B	6.319 B	-2.273 B
OP visits costs	-2.330 B	-2.290 B	-\$40.344 M
ED visits costs	-2.307 B	-2.311 B	\$3.701 M
Total hospitalizations costs	-5.263 B	-5.269 B	\$5.813 M
Total Cost (US\$)	-5.854 B	-3.550 B	-\$2.304 B
Total QALYs	935,469	933,880	1,589
ICER (\$/QALY)	Dominant	Dominant	Dominant

Scenario 3b: Cost-effectiveness results in adults at high risk of developing complications			
Cost of vaccines and administration	\$980.078 M	\$1.531 B	-\$550.694 M
OP visits costs	-560.843 M	-554.605 M	-6.237 M
ED visits costs	-981.685 M	-982.689 M	1.005 M
Total hospitalizations costs	-7,820.215 M	-7,827.098 M	6.882 M
Total Cost (US\$)	-8.383 B	-7.834 B	-549.044 M
Total QALYs	309,414	309,188	226
ICER (\$/QALY)	Dominant	Dominant	Dominant

Abbreviations: B, billion; ED emergency department; ICER; incremental cost-effectiveness ratio; M, million; OP, outpatient; QALY, quality-adjusted life year.