

IDSA 2026 Guidelines on the use of vaccines for the prevention of seasonal COVID-19, Influenza, and RSV infections in immunocompromised patients
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Supplemental material for Influenza section

Search Strategy

Supplemental Table 1. IDSA Supplemental Search

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Supplemental Figure 1. Pooled incidence rate ratios (IRRs) for risk of Guillain-Barre syndrome following Influenza vaccination from self-controlled case series

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IDSA Conflict of Interest

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Search Strategy

To establish the basis for recommendations, the panel reviewed the best available evidence published in the 18–24 months since the evidence base for the last CDC recommendations for each vaccine (search start dates were June 2024 for COVID-19; August 2024 for RSV; and August 2023 for influenza and search end date was July 31, 2025). A rapid systematic literature review conducted by the Vaccine Integrity Project provided evidence for vaccine effectiveness and serious adverse events [1], and a supplemental search within the same search limits provided evidence for exacerbations of immunocompromising or autoimmune conditions (see Supplemental Table 1). An updated search was conducted for the 2026-2027 season by VIP [2] (search start date was August 1, 2025 and end date was June 30, 2026).

Supplemental Table 1. IDSA Supplemental Search

A supplemental search was conducted for the additional outcome of ‘exacerbations of immunocompromising or autoimmune conditions.’ Searches were run individually for each specific population in PubMed. The timeframe for the searches was informed by the timeframe for the VIP searches. Title/abstract and full-text screening were done by a single reviewer using Excel. Staff completed a final review of included studies.

Inclusion Criteria: 1) reports data on exacerbations of immunocompromising or autoimmune conditions resulting from vaccination, 2) studies at least one U.S-licensed or emergency-authorized vaccine, 3) has a sample size ≥ 10

Exclusion Criteria: 1) studies on infection-based exacerbations, treating exacerbations, vaccine effectiveness, epidemiology, characterization of immune response, impact of dosing, comparison of vaccines, reports for other AEs (e.g., myocarditis/pericarditis), or exacerbations of non-IC conditions (e.g., alopecia)

PubMed Specific Populations Search Strategy

#	Descriptor	String
1	Vaccinations (flu, RSV, COVID-19	"covid 19 vaccines"[MeSH Major Topic] OR "Comirnaty"[Title/Abstract] OR "SPIKEVAX"[Title/Abstract] OR "MNEXSPIKE"[Title/Abstract] OR "Vaxzevria"[Title/Abstract] OR "Nuvaxovid"[Title/Abstract] OR "Covovax"[Title/Abstract] OR "NVX-CoV2373"[Title/Abstract] OR "COVID-19 vaccine"[Title/Abstract:~4] OR "covid 19 vaccines"[Title/Abstract:~4] OR "COVID-19 vaccination"[Title/Abstract:~4] OR "COVID-19 vaccinations"[Title/Abstract:~4] OR "COVID-19 vaccinate"[Title/Abstract:~4] OR "COVID-19 vaccinated"[Title/Abstract:~4] OR "COVID-19

		vaccinating"[Title/Abstract:~4] OR "COVID-19 immunization"[Title/Abstract:~4] OR "COVID-19 immunizations"[Title/Abstract:~4] OR "COVID-19 immunize"[Title/Abstract:~4] OR "COVID-19 immunized"[Title/Abstract:~4] OR "COVID-19 immunizing"[Title/Abstract:~4] OR "COVID-19 inoculation"[Title/Abstract:~4] OR "COVID-19 inoculations"[Title/Abstract:~4] OR "COVID-19 inoculate"[Title/Abstract:~4] OR "COVID-19 inoculated"[Title/Abstract:~4] OR "COVID-19 inoculating"[Title/Abstract:~4] OR "SARS-CoV-2 vaccine"[Title/Abstract:~4] OR "SARS-CoV-2 vaccines"[Title/Abstract:~4] OR "SARS-CoV-2 vaccination"[Title/Abstract:~4] OR "SARS-CoV-2 vaccinations"[Title/Abstract:~4] OR "SARS-CoV-2 vaccinate"[Title/Abstract:~4] OR "SARS-CoV-2 vaccinated"[Title/Abstract:~4] OR "SARS-CoV-2 vaccinating"[Title/Abstract:~4] OR "SARS-CoV-2 immunization"[Title/Abstract:~4] OR "SARS-CoV-2 immunizations"[Title/Abstract:~4] OR "SARS-CoV-2 immunize"[Title/Abstract:~4] OR "SARS-CoV-2 immunized"[Title/Abstract:~4] OR "SARS-CoV-2 immunizing"[Title/Abstract:~4] OR "SARS-CoV-2 inoculation"[Title/Abstract:~4] OR "SARS-CoV-2 inoculations"[Title/Abstract:~4] OR "SARS-CoV-2 inoculate"[Title/Abstract:~4] OR "SARS-CoV-2 inoculated"[Title/Abstract:~4] OR "SARS-CoV-2 inoculating"[Title/Abstract:~4] OR "Respiratory Syncytial Virus Vaccines"[MeSH Major Topic] OR "Abrysvo"[Title/Abstract] OR "Arexvy"[Title/Abstract] OR "MRESVIA"[Title/Abstract] OR "Beyfortus"[Title/Abstract] OR "nirsevimab"[Title/Abstract] OR "ENFLONIA"[Title/Abstract] OR "clesrovimab"[Title/Abstract] OR "Synagis"[Title/Abstract] OR "palivizumab"[Title/Abstract] OR "RSV vaccine"[Title/Abstract:~4] OR "RSV vaccines"[Title/Abstract:~4] OR "RSV vaccination"[Title/Abstract:~4] OR "RSV vaccinations"[Title/Abstract:~4] OR "RSV vaccinate"[Title/Abstract:~4] OR "RSV vaccinated"[Title/Abstract:~4] OR "RSV vaccinating"[Title/Abstract:~4] OR "RSV immunization"[Title/Abstract:~4] OR "RSV immunizations"[Title/Abstract:~4] OR "RSV immunize"[Title/Abstract:~4] OR "RSV immunized"[Title/Abstract:~4] OR "RSV immunizing"[Title/Abstract:~4] OR "RSV inoculation"[Title/Abstract:~4] OR "RSV inoculations"[Title/Abstract:~4] OR "RSV inoculate"[Title/Abstract:~4] OR "RSV inoculated"[Title/Abstract:~4] OR "RSV inoculating"[Title/Abstract:~4] OR "respiratory syncytial virus vaccine"[Title/Abstract:~4] OR "Respiratory Syncytial Virus Vaccines"[Title/Abstract:~4] OR "respiratory syncytial virus vaccination"[Title/Abstract:~4] OR "respiratory syncytial virus vaccinations"[Title/Abstract:~4] OR "respiratory syncytial virus vaccinate"[Title/Abstract:~4] OR "respiratory syncytial virus vaccinated"[Title/Abstract:~4] OR "respiratory syncytial virus vaccinating"[Title/Abstract:~4] OR "respiratory syncytial virus immunization"[Title/Abstract:~4] OR "respiratory syncytial virus immunizations"[Title/Abstract:~4] OR "respiratory syncytial virus immunize"[Title/Abstract:~4] OR "respiratory syncytial virus immunized"[Title/Abstract:~4] OR "respiratory syncytial virus immunizing"[Title/Abstract:~4] OR "respiratory syncytial virus inoculation"[Title/Abstract:~4] OR "respiratory syncytial virus inoculations"[Title/Abstract:~4] OR "respiratory syncytial virus inoculate"[Title/Abstract:~4] OR "respiratory syncytial virus inoculated"[Title/Abstract:~4] OR "respiratory syncytial virus inoculating"[Title/Abstract:~4] OR "Influenza Vaccines"[MeSH Major Topic] OR
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		"Fluzone"[Title/Abstract] OR "Afluria"[Title/Abstract] OR "Fluad"[Title/Abstract] OR "Flucelvax"[Title/Abstract] OR "FluMist"[Title/Abstract] OR "Flublok"[Title/Abstract] OR "Fluarix"[Title/Abstract] OR "Flulaval"[Title/Abstract] OR "Fluvirin"[Title/Abstract] OR "Agriflu"[Title/Abstract] OR "Arepanrix"[Title/Abstract] OR "Audenz"[Title/Abstract] OR "Afluria"[Title/Abstract] OR "flu vaccine"[Title/Abstract:~4] OR "flu vaccines"[Title/Abstract:~4] OR "flu vaccination"[Title/Abstract:~4] OR "flu vaccinations"[Title/Abstract:~4] OR "flu vaccinate"[Title/Abstract:~4] OR "flu vaccinated"[Title/Abstract:~4] OR "flu vaccinating"[Title/Abstract:~4] OR "flu immunization"[Title/Abstract:~4] OR "flu immunizations"[Title/Abstract:~4] OR "flu immunize"[Title/Abstract:~4] OR "flu immunized"[Title/Abstract:~4] OR "flu immunizing"[Title/Abstract:~4] OR "flu inoculation"[Title/Abstract:~4] OR "flu inoculations"[Title/Abstract:~4] OR "flu inoculate"[Title/Abstract:~4] OR "flu inoculated"[Title/Abstract:~4] OR "flu inoculating"[Title/Abstract:~4] OR "influenza vaccine"[Title/Abstract:~4] OR "Influenza Vaccines"[Title/Abstract:~4] OR "influenza vaccination"[Title/Abstract:~4] OR "influenza vaccinations"[Title/Abstract:~4] OR "influenza vaccinate"[Title/Abstract:~4] OR "influenza vaccinated"[Title/Abstract:~4] OR "influenza vaccinating"[Title/Abstract:~4] OR "influenza immunization"[Title/Abstract:~4] OR "influenza immunizations"[Title/Abstract:~4] OR "influenza immunize"[Title/Abstract:~4] OR "influenza immunized"[Title/Abstract:~4] OR "influenza immunizing"[Title/Abstract:~4] OR "influenza inoculation"[Title/Abstract:~4] OR "influenza inoculations"[Title/Abstract:~4] OR "influenza inoculate"[Title/Abstract:~4] OR "influenza inoculated"[Title/Abstract:~4] OR "influenza inoculating"[Title/Abstract:~4]
2	Specific population(s)	See appendix 1
3	Date filter	2023/08/26:2025/09/22[pdat]
4	Language filter	English[lang]
5	Exclusion by publication type & additional exclusion terms (from VIP search with addition of guidelines or “narrative review” in title)	"case reports"[Publication Type] OR "clinical trial protocol"[Publication Type] OR "clinical trial, veterinary"[Publication Type] OR "Comment"[Publication Type] OR "Editorial"[Publication Type] OR "Guideline"[Publication Type] OR "letter"[Publication Type] OR "practice guideline"[Publication Type] OR "Published Erratum"[Publication Type] OR "modeling"[Title] OR "modelling"[Title] OR "mathematical model"[Title/Abstract] OR "simulation model"[Title/Abstract] OR "simulation"[Title] OR "cost-effectiveness"[Title] OR "costing"[Title] OR "cost analysis"[Title/Abstract] OR "economic evaluation"[Title/Abstract] OR "cost utility"[Title/Abstract] OR "microsimulation"[Title/Abstract] OR "markov model"[Title/Abstract] OR "agent-based model"[Title/Abstract] OR "macaque"[Title] OR "primate"[Title] OR "case report"[Title] OR "mouse model"[Title/Abstract] OR "murine"[Title/Abstract] OR "in vitro"[Title] OR "cell line"[Title/Abstract] OR "protein structure"[Title/Abstract] OR "molecular docking"[Title/Abstract] OR "molecular dynamics"[Title/Abstract] OR "animal model"[Title/Abstract] OR "rodent"[Title/Abstract] OR

		"bioinformatics"[Title/Abstract] OR "receptor binding"[Title/Abstract] OR "viral genome"[Title/Abstract] OR Guidelines[TI] OR "Narrative review"[TI]
Search		1 AND 2 AND 3 AND 4 NOT 5

Appendix 1. Specific population search strings

a. Solid Organ Transplant

"Tissue Transplantation"[MeSH Terms] OR "Organ Transplantation"[MeSH Terms] OR ("transplant"[Title/Abstract] AND ("kidney"[Title/Abstract] OR "liver"[Title/Abstract] OR "heart"[Title/Abstract] OR "lung"[Title/Abstract] OR "intestine"[Title/Abstract] OR "pancreas"[Title/Abstract] OR "multivisceral"[Title/Abstract] OR "organ"[Title/Abstract] OR "tissue"[Title/Abstract]))

b. HCT/CAR-T & JAK-STAT inhibitors

("Hematopoietic Stem Cell Transplantation"[MeSH Terms] OR "Bone Marrow Transplantation"[MeSH Terms] OR "immunotherapy, adoptive"[MeSH Terms] OR ("bone marrow transplant"[Title/Abstract] OR "bone marrow transplants"[Title/Abstract] OR "Bone Marrow Transplantation"[Title/Abstract] OR "bone marrow transplantations"[Title/Abstract] OR "stem cell transplant"[Title/Abstract] OR "stem cell transplants"[Title/Abstract] OR "stem cell transplantation"[Title/Abstract] OR "stem cell transplantations"[Title/Abstract] OR "car t"[Title/Abstract] OR "car t"[Title/Abstract] OR "cord blood transplant"[Title/Abstract] OR "cord blood transplants"[Title/Abstract] OR "cord blood transplantation"[Title/Abstract] OR "cord blood transplantations"[Title/Abstract] OR "Chimeric Antigen Receptor Therapy"[Title/Abstract] OR "Chimeric Antigen Receptor Therapies"[Title/Abstract])) AND ("janus kinase inhibitors"[MeSH Terms] OR "janus kinase inhibitors"[Pharmacological Action] OR ("Janus kinase-signal transducers and activators of transcription"[Title/Abstract] OR "janus kinase inhibitors"[Title/Abstract:~4] OR "Janus kinase inhibitor"[Title/Abstract:~4] OR "JAK inhibitor"[Title/Abstract:~4] OR "JAK inhibitors"[Title/Abstract:~4] OR "ruxolitinib"[Title/Abstract] OR "tofacitinib"[Title/Abstract] OR "baricitinib"[Title/Abstract] OR "itacitinib"[Title/Abstract] OR "Upadacitinib"[Title/Abstract] OR "filgotinib"[Title/Abstract] OR "abrocitinib"[Title/Abstract] OR "oclocitinib"[Title/Abstract] OR "fedratinib"[Title/Abstract] OR "pacritinib"[Title/Abstract] OR "decernotinib"[Title/Abstract] OR "ritlecinib"[Title/Abstract] OR "deucravacitinib"[Title/Abstract] OR "delgocitinib"[Title/Abstract] OR "peficitinib"[Title/Abstract]))

c. Hematologic Malignancies

"Leukemia"[MeSH Terms] OR "Lymphoma"[MeSH Terms] OR "Multiple Myeloma"[MeSH Terms] OR "leukemia"[Title/Abstract] OR "lymphoma"[Title/Abstract] OR "myeloma"[Title/Abstract] OR "hematologic malignancy"[Title/Abstract] OR "hematologic malignancies"[Title/Abstract] OR "hematologic malignant"[Title/Abstract:~4]

d. Solid Tumor Chemotherapy

"neoplasms/drug therapy"[MeSH Terms] OR ("solid tumor"[Title/Abstract] OR "Glioblastoma"[Title/Abstract] OR "Astrocytoma"[Title/Abstract] OR "Oligodendroglioma"[Title/Abstract] OR "Meningioma"[Title/Abstract] OR "Medulloepithelioma"[Title/Abstract] OR "Craniopharyngioma"[Title/Abstract] OR "oral cavity cancer"[Title/Abstract] OR "pharyngeal cancer"[Title/Abstract] OR "laryngeal cancer"[Title/Abstract] OR "salivary gland tumor"[Title/Abstract] OR "thyroid cancer"[Title/Abstract] OR "parathyroid cancer"[Title/Abstract] OR "lung cancer"[Title/Abstract] OR "mesothelioma"[Title/Abstract] OR "thymoma"[Title/Abstract] OR "esophageal cancer"[Title/Abstract] OR "gastric cancer"[Title/Abstract] OR "stomach

cancer"[Title/Abstract] OR "colorectal cancer"[Title/Abstract] OR "liver cancer"[Title/Abstract] OR "hepatocellular carcinoma"[Title/Abstract] OR "pancreatic cancer"[Title/Abstract] OR "gallbladder cancer"[Title/Abstract] OR "bile duct cancer"[Title/Abstract] OR "cholangiocarcinoma"[Title/Abstract] OR "kidney cancer"[Title/Abstract] OR "renal cell carcinoma"[Title/Abstract] OR "bladder cancer"[Title/Abstract] OR "prostate cancer"[Title/Abstract] OR "testicular cancer"[Title/Abstract] OR "penile cancer"[Title/Abstract] OR "breast cancer"[Title/Abstract] OR "ovarian cancer"[Title/Abstract] OR "endometrial cancer"[Title/Abstract] OR "cervical cancer"[Title/Abstract] OR "vulvar cancer"[Title/Abstract] OR "vaginal cancer"[Title/Abstract] OR "osteosarcoma"[Title/Abstract] OR "chondrosarcoma"[Title/Abstract] OR "Ewing sarcoma"[Title/Abstract] OR "soft tissue sarcomas"[Title/Abstract] OR "melanoma"[Title/Abstract] OR "basal cell carcinoma"[Title/Abstract] OR "squamous cell carcinoma"[Title/Abstract] OR "Merkel cell carcinoma"[Title/Abstract] OR "adrenal cancer"[Title/Abstract] OR "pituitary tumor*"[Title/Abstract] OR "neuroendocrine tumor*"[Title/Abstract]) AND ("Antineoplastic Agents"[MeSH Terms] OR "chemotherap*"[Title/Abstract] OR "anticancer therapy"[Title/Abstract] OR "anticancer therapies"[Title/Abstract] OR "antineoplastic agent"[Title/Abstract] OR "Antineoplastic Agents"[Title/Abstract] OR "anticancer drug"[Title/Abstract] OR "anticancer drugs"[Title/Abstract] OR "Altretamine"[Title/Abstract] OR "Bendamustine"[Title/Abstract] OR "Busulfan"[Title/Abstract] OR "Carmustine"[Title/Abstract] OR "Chlorambucil"[Title/Abstract] OR "Cyclophosphamide"[Title/Abstract] OR "Dacarbazine"[Title/Abstract] OR "Ifosfamide"[Title/Abstract] OR "Lomustine"[Title/Abstract] OR "Lurbinectedin"[Title/Abstract] OR "Mechlorethamine"[Title/Abstract] OR "Melphalan"[Title/Abstract] OR "Procarbazine"[Title/Abstract] OR "Streptozocin"[Title/Abstract] OR "Temozolomide"[Title/Abstract] OR "Thiotepa"[Title/Abstract] OR "Trabectedin"[Title/Abstract] OR "Methotrexate"[Title/Abstract] OR "Pemetrexed"[Title/Abstract] OR "Pralatrexate"[Title/Abstract] OR "Trimetrexate"[Title/Abstract] OR "Azathioprine"[Title/Abstract] OR "Cladribine"[Title/Abstract] OR "Fludarabine"[Title/Abstract] OR "Mercaptopurine"[Title/Abstract] OR "Thioguanine"[Title/Abstract] OR "Azacitidine"[Title/Abstract] OR "Capecitabine"[Title/Abstract] OR "Cytarabine"[Title/Abstract] OR "Decitabine"[Title/Abstract] OR "Floxuridine"[Title/Abstract] OR "Fluorouracil"[Title/Abstract] OR "Gemcitabine"[Title/Abstract] OR "Trifluridine"[Title/Abstract] OR "Tipiracil"[Title/Abstract] OR "Aldesleukin"[Title/Abstract] OR "denileukin diftitox"[Title/Abstract] OR "Interferon Gamma"[Title/Abstract] OR "Belinostat"[Title/Abstract] OR "Panobinostat"[Title/Abstract] OR "Romidepsin"[Title/Abstract] OR "Vorinostat"[Title/Abstract] OR "Abiraterone"[Title/Abstract] OR "Apalutamide"[Title/Abstract] OR "Bicalutamide"[Title/Abstract] OR "Cypoterone"[Title/Abstract] OR "Enzalutamide"[Title/Abstract] OR "Flutamide"[Title/Abstract] OR "Nilutamide"[Title/Abstract] OR "Anastrozole"[Title/Abstract] OR "Exemestane"[Title/Abstract] OR "Fulvestrant"[Title/Abstract] OR "Letrozole"[Title/Abstract] OR "Raloxifene"[Title/Abstract] OR "Tamoxifen"[Title/Abstract] OR "Toremifene"[Title/Abstract] OR "Degarelix"[Title/Abstract] OR "Goserelin"[Title/Abstract] OR "Histrelin"[Title/Abstract] OR "Leuprolide"[Title/Abstract] OR "Relugolix"[Title/Abstract] OR "Triptorelin"[Title/Abstract] OR "Lanreotide"[Title/Abstract] OR "Octreotide"[Title/Abstract] OR "Pasireotide"[Title/Abstract] OR "Carboplatin"[Title/Abstract] OR "Cisplatin"[Title/Abstract] OR "Oxaliplatin"[Title/Abstract] OR "Alemtuzumab"[Title/Abstract] OR "Amivantamab"[Title/Abstract] OR "Atezolizumab"[Title/Abstract] OR "Avelumab"[Title/Abstract] OR "Belantamab"[Title/Abstract] OR "Bevacizumab"[Title/Abstract] OR "Blinatumomab"[Title/Abstract] OR "Brentuximab"[Title/Abstract] OR "Cemiplimab"[Title/Abstract] OR "Cetuximab"[Title/Abstract] OR "Daratumumab"[Title/Abstract] OR "Dinutuximab"[Title/Abstract] OR "Dostarlimab"[Title/Abstract] OR "Durvalumab"[Title/Abstract] OR "Elotuzumab"[Title/Abstract] OR "Enfortumab"[Title/Abstract] OR "Gemtuzumab"[Title/Abstract] OR "inotuzumab ozogamicin"[Title/Abstract] OR "Ipilimumab"[Title/Abstract] OR "Margetuximab"[Title/Abstract] OR "Mogamulizumab"[Title/Abstract] OR "moxetumomab pasudotox"[Title/Abstract] OR "Naxitamab"[Title/Abstract] OR

"Necitumumab"[Title/Abstract] OR "Nivolumab"[Title/Abstract] OR "Ofatumumab"[Title/Abstract] OR "Olaratumab"[Title/Abstract] OR "Panitumumab"[Title/Abstract] OR "Pembrolizumab"[Title/Abstract] OR "Pertuzumab"[Title/Abstract] OR "polatuzumab vedotin"[Title/Abstract] OR "Ramucirumab"[Title/Abstract] OR "Rituximab"[Title/Abstract] OR "sacituzumab govitecan"[Title/Abstract] OR "Tafasitamab"[Title/Abstract] OR "Teclistamab"[Title/Abstract] OR "Tisotumab"[Title/Abstract] OR "Vedotin"[Title/Abstract] OR "Tositumomab"[Title/Abstract] OR "Trastuzumab"[Title/Abstract] OR "trastuzumab deruxtecan"[Title/Abstract] OR "trastuzumab emtansine"[Title/Abstract] OR "Tremelimumab"[Title/Abstract] OR "Abemaciclib"[Title/Abstract] OR "Acalabrutinib"[Title/Abstract] OR "Adagrasib"[Title/Abstract] OR "Afatinib"[Title/Abstract] OR "Alectinib"[Title/Abstract] OR "Alpelisib"[Title/Abstract] OR "Asciminib"[Title/Abstract] OR "Axitinib"[Title/Abstract] OR "Binimetinib"[Title/Abstract] OR "Bortezomib"[Title/Abstract] OR "Bosutinib"[Title/Abstract] OR "Brigatinib"[Title/Abstract] OR "Cabozantinib"[Title/Abstract] OR "Capivasertib"[Title/Abstract] OR "Capmatinib"[Title/Abstract] OR "Carfilzomib"[Title/Abstract] OR "Ceritinib"[Title/Abstract] OR "Cobimetinib"[Title/Abstract] OR "Copanlisib"[Title/Abstract] OR "Crizotinib"[Title/Abstract] OR "Dabrafenib"[Title/Abstract] OR "Dacomitinib"[Title/Abstract] OR "Dasatinib"[Title/Abstract] OR "Duvelisib"[Title/Abstract] OR "Enasidenib"[Title/Abstract] OR "Encorafenib"[Title/Abstract] OR "Ensartinib"[Title/Abstract] OR "Entrectinib"[Title/Abstract] OR "Erdafitinib"[Title/Abstract] OR "Erlotinib"[Title/Abstract] OR "Fedratinib"[Title/Abstract] OR "Fruquintinib"[Title/Abstract] OR "Futibatinib"[Title/Abstract] OR "Gefitinib"[Title/Abstract] OR "Gilteritinib"[Title/Abstract] OR "Glasdegib"[Title/Abstract] OR "Ibrutinib"[Title/Abstract] OR "Idelalisib"[Title/Abstract] OR "Imatinib"[Title/Abstract] OR "Infigratinib"[Title/Abstract] OR "Inavolisib"[Title/Abstract] OR "Ivosidenib"[Title/Abstract] OR "Ixazomib"[Title/Abstract] OR "Lapatinib"[Title/Abstract] OR "Larotrectinib"[Title/Abstract] OR "Lazertinib"[Title/Abstract] OR "Lenvatinib"[Title/Abstract] OR "Lorlatinib"[Title/Abstract] OR "Midostaurin"[Title/Abstract] OR "Mobocertinib"[Title/Abstract] OR "Momelotinib"[Title/Abstract] OR "Neratinib"[Title/Abstract] OR "Nilotinib"[Title/Abstract] OR "Niraparib"[Title/Abstract] OR "Olaparib"[Title/Abstract] OR "Olutasidenib"[Title/Abstract] OR "Osimertinib"[Title/Abstract] OR "Pacritinib"[Title/Abstract] OR "Palbociclib"[Title/Abstract] OR "Pazopanib"[Title/Abstract] OR "Pemigatinib"[Title/Abstract] OR "Pexidartinib"[Title/Abstract] OR "Pirtobrutinib"[Title/Abstract] OR "Ponatinib"[Title/Abstract] OR "Quizartinib"[Title/Abstract] OR "Regorafenib"[Title/Abstract] OR "Repotrectinib"[Title/Abstract] OR "Revumenib"[Title/Abstract] OR "Ribociclib"[Title/Abstract] OR "Ripretinib"[Title/Abstract] OR "Rucaparib"[Title/Abstract] OR "Ruxolitinib"[Title/Abstract] OR "Selumetinib"[Title/Abstract] OR "Sonidegib"[Title/Abstract] OR "Sorafenib"[Title/Abstract] OR "Sunitinib"[Title/Abstract] OR "Talazoparib"[Title/Abstract] OR "Tivozanib"[Title/Abstract] OR "Tovorafenib"[Title/Abstract] OR "Trametinib"[Title/Abstract] OR "Trilaciclib"[Title/Abstract] OR "Umbralisib"[Title/Abstract] OR "Vandetanib"[Title/Abstract] OR "Vemurafenib"[Title/Abstract] OR "Vismodegib"[Title/Abstract] OR "Zanubrutinib"[Title/Abstract] OR "Cabazitaxel"[Title/Abstract] OR "Docetaxel"[Title/Abstract] OR "Paclitaxel"[Title/Abstract] OR "Etoposide"[Title/Abstract] OR "Irinotecan"[Title/Abstract] OR "Teniposide"[Title/Abstract] OR "Topotecan"[Title/Abstract] OR "Vinblastine"[Title/Abstract] OR "Vincristine"[Title/Abstract] OR "Vinorelbine"[Title/Abstract] OR "Asparaginase"[Title/Abstract] OR "Pegaspargase"[Title/Abstract] OR "Belzutifan"[Title/Abstract] OR "Bexarotene"[Title/Abstract] OR "Cedazuridine"[Title/Abstract] OR "Eribulin"[Title/Abstract] OR "Everolimus"[Title/Abstract] OR "Hydroxyurea"[Title/Abstract] OR "Ixabepilone"[Title/Abstract] OR "Lenalidomide"[Title/Abstract] OR "Mitotane"[Title/Abstract] OR "Omacetaxine"[Title/Abstract] OR "Pomalidomide"[Title/Abstract] OR "Selinexor"[Title/Abstract] OR "Tagraxofusp"[Title/Abstract] OR "Tazemetostat"[Title/Abstract] OR "Tebentafusp"[Title/Abstract] OR "Telotristat"[Title/Abstract] OR "Temsilolimus"[Title/Abstract] OR "Thalidomide"[Title/Abstract] OR "Venetoclax"[Title/Abstract]))

e. Primary Immunodeficiency

"Primary Immunodeficiency Diseases"[MeSH Terms] OR "primary immunodeficiencies"[Title/Abstract] OR "primary immunodeficiency"[Title/Abstract] OR "primary immune disorders"[Title/Abstract] OR "primary immune disorder"[Title/Abstract] OR "primary immune disease"[Title/Abstract] OR "primary immune diseases"[Title/Abstract] OR "Ataxia Telangiectasia"[Title/Abstract] OR "Bloom Syndrome"[Title/Abstract] OR "Chediak-Higashi Syndrome"[Title/Abstract] OR "Hereditary Complement Deficiency Diseases"[Title/Abstract] OR "Hereditary Angioedemas"[Title/Abstract] OR "Hyper-IgM Immunodeficiency Syndrome"[Title/Abstract] OR "Job Syndrome"[Title/Abstract] OR "Leukocyte-Adhesion Deficiency Syndrome"[Title/Abstract] OR "Severe Combined Immunodeficiency"[Title/Abstract] OR "X-Linked Combined Immunodeficiency Diseases"[Title/Abstract] OR "Wiskott-Aldrich Syndrome"[Title/Abstract] OR "inborn errors of immunity"[Title/Abstract:~3]

f. Autoimmune on Immunosuppressants/Biologics

"autoimmune diseases/drug therapy"[MeSH Terms] OR ("autoimmune disease"[Title/Abstract] OR "autoimmune diseases"[Title/Abstract] OR "Autoimmune Polyendocrinopathies"[Title/Abstract] OR "autoimmune diabetes"[Title/Abstract] OR "Autoimmune hepatitis"[Title/Abstract] OR "Addison Disease"[Title/Abstract] OR "Anti-Glomerular Basement Membrane Disease"[Title/Abstract] OR "Anti-Neutrophil Cytoplasmic Antibody-Associated Vasculitis"[Title/Abstract] OR "Churg-Strauss Syndrome"[Title/Abstract] OR "Granulomatosis with Polyangiitis"[Title/Abstract] OR "Microscopic Polyangiitis"[Title/Abstract] OR "Antiphospholipid Syndrome"[Title/Abstract] OR "Juvenile Arthritis"[Title/Abstract] OR "Rheumatoid Arthritis"[Title/Abstract] OR "Felty Syndrome"[Title/Abstract] OR "Rheumatoid Vasculitis"[Title/Abstract] OR "Sjogren's Syndrome"[Title/Abstract] OR "Still's Disease"[Title/Abstract] OR "Anti-N-Methyl-D-Aspartate Receptor Encephalitis"[Title/Abstract] OR "Myasthenia Gravis"[Title/Abstract] OR "Myelin Oligodendrocyte Glycoprotein Antibody-Associated Disease"[Title/Abstract] OR "Polyradiculoneuropathy"[Title/Abstract] OR "Stiff-Person Syndrome"[Title/Abstract] OR "Uveomeningoencephalitic Syndrome"[Title/Abstract] OR "Autoimmune Hypophysitis"[Title/Abstract] OR "Autoimmune Lymphoproliferative Syndrome"[Title/Abstract] OR "Autoimmune Pancreatitis"[Title/Abstract] OR "Birdshot Chorioretinopathy"[Title/Abstract] OR "Dermatitis Herpetiformis"[Title/Abstract] OR "Glomerulonephritis"[Title/Abstract] OR "Graves Disease"[Title/Abstract] OR "Graves Ophthalmopathy"[Title/Abstract] OR "Immunoglobulin G4-Related Disease"[Title/Abstract] OR "Linear IgA Bullous Dermatitis"[Title/Abstract] OR "Lupus"[Title/Abstract] OR "Sympathetic Ophthalmia"[Title/Abstract] OR "Bullous Pemphigoid"[Title/Abstract] OR "Pemphigus"[Title/Abstract] OR "Thrombocytopenic Purpura"[Title/Abstract] OR "Autoimmune Thyroiditis"[Title/Abstract] OR "Hashimoto Disease"[Title/Abstract] OR "Postpartum Thyroiditis"[Title/Abstract] OR "Undifferentiated Connective Tissue Diseases"[Title/Abstract] OR "Multiple sclerosis"[Title/Abstract] OR "Diffuse cerebral sclerosis of schilder"[Title/Abstract] OR "Encephalomyelitis"[Title/Abstract] OR "Leukoencephalitis"[Title/Abstract] OR "Transverse myelitis"[Title/Abstract] OR "Neuromyelitis optica"[Title/Abstract] OR "Autoimmune neuritis"[Title/Abstract] OR "Giant cell arteritis"[Title/Abstract] OR "psoriasis"[Title/Abstract] OR "Crohn's"[Title/Abstract] OR "ulcerative colitis"[Title/Abstract] OR "inflammatory bowel disease"[Title/Abstract] OR "autoimmune anemia"[Title/Abstract:~4] OR "Diabetes Type 1"[Title/Abstract:~3]) AND ("Immunosuppressive Agents"[MeSH Terms] OR "Biological Products"[MeSH Terms] OR "interleukin inhibitor"[Title/Abstract:~3] OR "interleukin inhibitors"[Title/Abstract:~3] OR "Tumor necrosis factor inhibitor"[Title/Abstract] OR "tumor necrosis factor inhibitors"[Title/Abstract] OR "TNF inhibitor"[Title/Abstract] OR "TNF inhibitors"[Title/Abstract] OR "checkpoint inhibitor"[Title/Abstract] OR "checkpoint inhibitors"[Title/Abstract] OR "disease-modifying antirheumatic drugs"[Title/Abstract] OR "DMARD"[Title/Abstract] OR "DMARDs"[Title/Abstract] OR "biologic*"[Title/Abstract] OR "monoclonal antibody"[Title/Abstract] OR "monoclonal antibodies"[Title/Abstract] OR "immunosuppress*"[Title/Abstract] OR "immunotherap*"[Title/Abstract] OR "MTOR inhibitor"[Title/Abstract] OR "MTOR

inhibitors"[Title/Abstract] OR "steroids"[Title/Abstract] OR "corticosteroids"[Title/Abstract] OR "prednisone"[Title/Abstract] OR "prednisolone"[Title/Abstract] OR "methylprednisolone"[Title/Abstract] OR "dexamethasone"[Title/Abstract] OR "colchicine"[Title/Abstract] OR "Hydroxychloroquine"[Title/Abstract] OR "Sulfasalazine"[Title/Abstract] OR "leflunomide"[Title/Abstract] OR "cyclophosphamide"[Title/Abstract] OR "tacrolimus"[Title/Abstract] OR "dapsone"[Title/Abstract] OR "methotrexate"[Title/Abstract] OR "mycophenolate mofetil"[Title/Abstract] OR "Cellcept"[Title/Abstract] OR "Myfortic"[Title/Abstract] OR "azathioprine"[Title/Abstract] OR "anakinra"[Title/Abstract] OR "canakinumab"[Title/Abstract] OR "rilonacept"[Title/Abstract] OR "infliximab"[Title/Abstract] OR "adalimumab"[Title/Abstract] OR "golimumab"[Title/Abstract] OR "etanercept"[Title/Abstract] OR "certolizumab"[Title/Abstract] OR "tocilizumab"[Title/Abstract] OR "sarilumab"[Title/Abstract] OR "eculizumab"[Title/Abstract] OR "rituximab"[Title/Abstract] OR "belimumab"[Title/Abstract] OR "cyclosporine"[Title/Abstract] OR "abatacept"[Title/Abstract] OR "secukinumab"[Title/Abstract] OR "ixekizumab"[Title/Abstract] OR "brodalumab"[Title/Abstract] OR "guselkumab"[Title/Abstract] OR "mepolizumab"[Title/Abstract] OR "reslizumab"[Title/Abstract] OR "benralizumab"[Title/Abstract] OR "dupilumab"[Title/Abstract] OR "vedolizumab"[Title/Abstract] OR "tofacitinib"[Title/Abstract] OR "baricitinib"[Title/Abstract] OR "Upadacitinib"[Title/Abstract] OR "sirolimus"[Title/Abstract] OR "everolimus"[Title/Abstract] OR "thalidomide"[Title/Abstract] OR "lenalidomide"[Title/Abstract] OR "apremilast"[Title/Abstract] OR "nivolumab"[Title/Abstract] OR "pembrolizumab"[Title/Abstract] OR "atezolizumab"[Title/Abstract] OR "avelumab"[Title/Abstract] OR "ipilimumab"[Title/Abstract]))

g. HIV

"HIV Infections"[MeSH Terms] OR "Acquired Immunodeficiency Syndrome"[MeSH Terms] OR "HIV"[Title/Abstract] OR "AIDS"[Title/Abstract] OR "human immunodeficiency virus"[Title/Abstract] OR "Acquired Immunodeficiency Syndrome"[Title/Abstract]

Supplemental Table 2. Study Characteristics

Outcome: Influenza-associated hospitalization (immunocompromised adults)

Author, year of publication	Location, dates of data collection	Study design	Population	Case	Control	Influenza vaccine type	Results & Notes
Lewis 2025	USA September 2023-May 2024	Case-Control (Test-negative design)	Adults ≥18 years hospitalized with acute respiratory illness	Patients tested positive for influenza virus and negative for SARS-CoV-2	Patients tested negative for both influenza and SARS-CoV-2	2023-24 seasonal influenza vaccine	212 cases and 1639 controls; VE: 32% (95% CI 7-50%) in immunocompromised adults

Outcome: Influenza-associated hospitalization (overall adults ≥65 yrs)

Author, year of publication	Location, dates of data collection	Study design	Population	Cases	Controls	Influenza vaccine type	Results & Notes
Gharpure 2025	Argentina, Australia, Brazil, Chile, New Zealand, Paraguay, Thailand, and Uruguay; March 5 to Nov 27, 2023	Case control (test-negative design)	Hospitalized patients with severe acute respiratory infection	Patients tested positive for influenza	Patients tested negative for both influenza and SARS-CoV-2	2023 season influenza vaccine	Total 12,609 patients from 8 countries. Influenza vaccination was found to be effective against severe acute respiratory infection hospitalization
Martinez-Baz 2025	Spain; November 2023 to March 2024	Case control (test-negative design)	Patients who were consulted in the primary care sentinel network or were hospitalized due to	Patients tested positive for influenza by RT-PCR	Patients from the same settings tested negative for influenza	2023-24 influenza vaccine	402 cases and 1395 controls; adjusted VE: 28% (95% CI: 6 to 45) in older adults

			respiratory symptoms				
Rose 2025	17 countries; September/October 2024-January 2025 (Depending on the site)	Case control (test-negative design)	Patients with influenza-like illness or acute respiratory infection symptoms in primary care or hospital settings	Patients positive for any influenza virus	Patients negative for all influenza viruses by RT-PCR	2024-25 Influenza vaccine	Vaccination was overall found to be effective against influenza in older adults; VE > 45% in all countries except Scotland (29% 95% CI: 23-36%)
Emborg 2025	Denmark; 1 October 2024 to 4 March 2025	Case control (test-negative design)	Adults ≥ 65 years with influenza-like illness and/or lower respiratory symptoms	Patients positive for either influenza A or B by RT-PCR	Patients negative for both influenza A and B by RT-PCR	Quadrivalent influenza vaccine (QIV)	978 cases and 9913 controls. VE with standard dose QIV: 36% (95% CI 23-47)
Maurel 2024	Europe; September 2023 to January 2024	Case control (test-negative design)	Hospitalized patients with severe acute respiratory infection (SARI)	Patients tested positive for influenza by RT-PCR	Patients tested negative for influenza by RT-PCR	2023-24 influenza vaccine	703 cases and 2544 controls. VE: 36% (95% CI 22-47%) in older adults
Frutos 2025	USA; October 2024–February 2025	Case control (test-negative design)	Patients with acute respiratory infection (ARI)	Patients with positive influenza molecular assay	Patients with negative influenza molecular assay	2024-25 influenza vaccine	1897 cases and 19271 controls; VE: 57% (95% CI 52-61%) in older adults
Frutos 2024	USA; IVY: September 1, 2023–January 31, 2024; VISION: October 15, 2023–January 15, 2024.	Case control (test-negative design)	Patients with acute respiratory infection (ARI)	Patients with positive influenza molecular assay	Patients with negative influenza molecular assay	2023-24 influenza vaccine	IVY: 249 cases and 1945 controls, VE: 42% (95% CI 23-56%) in older adults; VISION: 1066 cases and 10118 controls, VE: 42% (95% CI 34-50%) in older adults

Silva-Afonso 2025	Spain; week 40 of 2023 – week 20 of 2024	Case control (test-negative design)	Patients with severe acute respiratory infection (SARI)	Influenza positive	No influenza	Any influenza vaccine	165 cases and 1366 controls; VE: 38.8% (95% CI: 15.0–55.8) in older adults
Tenforde 2025	USA; October 2023-April 2024	Case control (test-negative design)	Patients with ARI-associated ED/urgent care encounters or hospitalizations who required ICU care	Patients who tested positive for influenza by molecular assay	Patients who tested negative for influenza by molecular assay, as well as SARS-CoV-2	2023-24 influenza vaccine	3227 cases and 41513 controls; VE: 36% (95% CI 31-41%) in older adults
Lewis 2025	USA September 2023-May 2024	Case control (test-negative design)	Adults ≥18 years hospitalized with acute respiratory illness	Patients tested positive for influenza virus and negative for SARS-CoV-2	Patients tested negative for both influenza and SARS-CoV-2	2023-24 seasonal influenza vaccine	505 cases and 3383 controls; VE: 31% (16-43%) in older adults
Domnich 2025	Italy; November 2024-April 2025	Case control (test negative design)	Adults ≥18 years referred to hospital ED	Patients testing positive for influenza virus by RT-PCR	Patients tested negative for influenza virus	2024-2025 seasonal influenza vaccine	129 cases; 929 controls; VE: 43% (14-62%) in older adults

Outcome: All-cause mortality (Overall adults ≥ 60 yrs)

Author, year of publication	Location, dates of data collection	Study design	Population	Intervention	Comparator	Results & Notes
Acuti Martellucci 2025	Italy; October 2023 to September 2024	Retrospective cohort	Adults ≥ 60 yrs	Influenza vaccine	No vaccine	7372 patients received non-adjuvanted standard dose and 59172 were unvaccinated; adjusted Hazards ratio of all-cause mortality was 0.47 (0.37-0.59)

Outcome: Severe disease (ICU admission, in overall adults >18 yrs)

Author, year of publication	Location, dates of data collection	Study design	Population	Intervention	Comparator	Results & Notes
Tenforde 2024	USA; October 2023-April 2024	Case control (test-negative design)	Patients with ARI-associated ED/urgent care encounters or hospitalizations who required ICU care	Patients who tested positive for influenza by molecular assay	Patients who tested negative for influenza by molecular assay, as well as SARS-CoV-2	824 cases, 12,544 controls: 41% VE (95% CI: 31-50)

Outcome: Guillain-Barre Syndrome (overall adults ≥65 yrs)

Author, year of publication	Location, dates of data collection	Study design	Population	Intervention	Comparator	Results & Notes
Lloyd 2025	USA; August 2023 to June 2024 (Fee-for-service) or August 2024 (Medicare Advantage)	Self-controlled Case series	Adults ≥65 years in the FFS and MA Medicare populations who received a 2023-2024 influenza vaccine	At risk window: 1-42 days post-vaccination	Control window: 43-90 days post-vaccination	Total Fee For service: 12,660,709 and Medicare advantage: 7,597,297 patients IRR for GBS with any influenza vaccine were 1.10 (0.74, 1.63) for FFS and 0.72 (0.34, 1.51) for Medicare advantage
Shi 2024	USA; August 2022 to June 2023	Self-controlled Case series	Adults ≥65 years in the FFS Medicare population who received a 2022-2023 influenza vaccine	At risk window: 1-42 days post-vaccination	Control window: 43-90 days post-vaccination	Among 12.7 million vaccine recipients, 134 Guillain-Barre syndrome events occurred. IRR 0.90 (95% CI: 0.56-1.42) in the seasonality-adjusted and PPV-based imputation analysis

Outcome: Severe adverse events (overall adults)

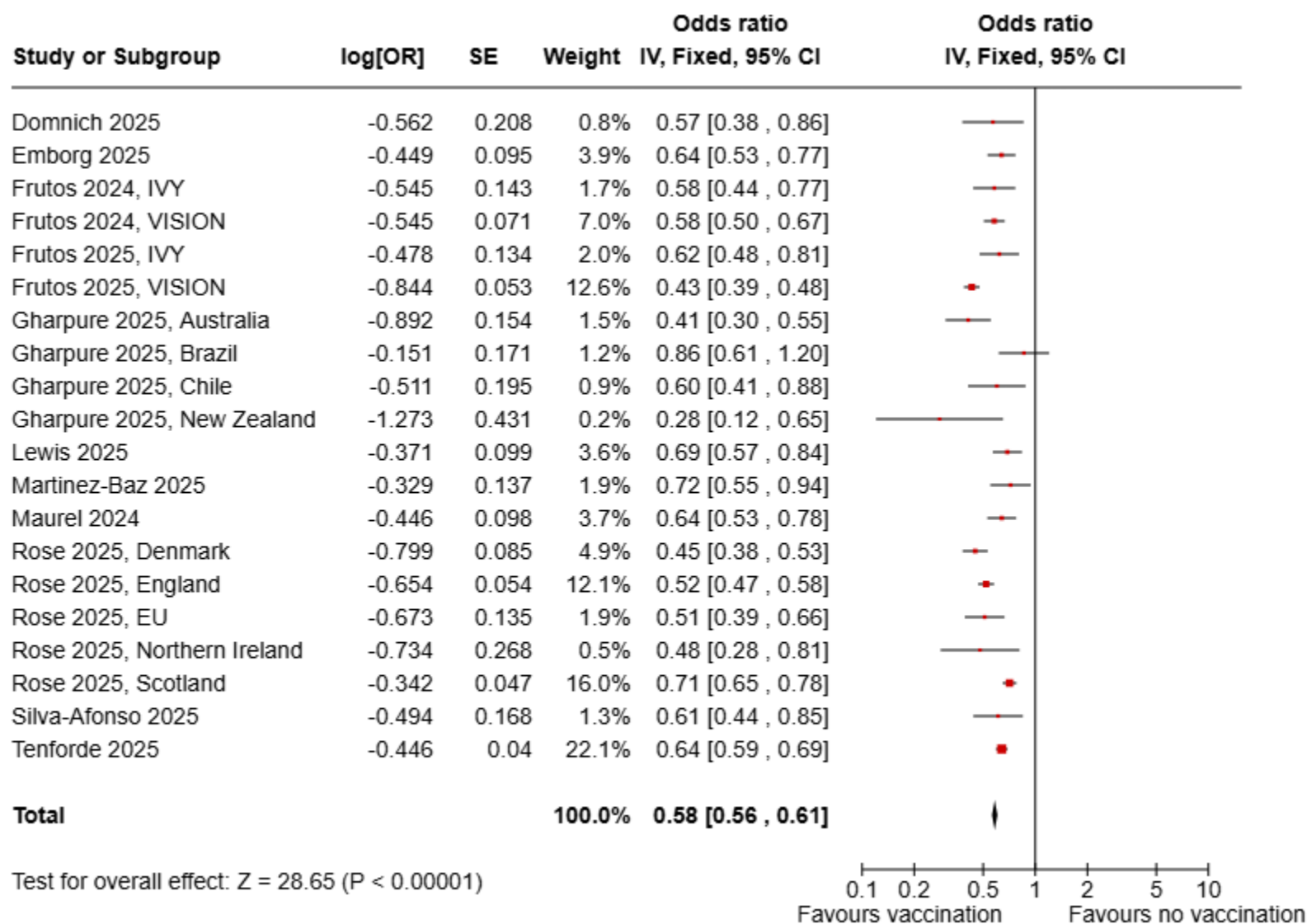
Author, year of publication	Location, dates of data collection	Study design	Population	Intervention	Comparator	Results & Notes
Lloyd 2025	USA; August 2023 to June 2024 (Fee-for-service) or August 2024 (Medicare Advantage)	Self-controlled Case series	Adults ≥ 65 years in the FFS and MA Medicare populations who received a 2023-2024 influenza vaccine	At risk window: 1-42 days post-vaccination	Control window: 43-90 days post-vaccination	Total Fee For service: 12,660,709 and Medicare advantage: 7,597,297 patients Study found no increased risk of ischemic or hemorrhagic stroke following various influenza vaccines overall but identified a statistically significant increased risk of a composite of ischemic stroke or TIA occurring 22-42 days after influenza vaccination (i.e. Medicare Advantage population, IRR 1.10, 95% CI, 1.02 to 1.17).
Tanaka 2024	Canada; September 2009 to December 2018	Self-controlled Case series	Adults registered under the Alberta Health Care Insurance Plan	Stroke within 3, 7, 14, 21, and 30 days of influenza vaccination	Unexposed time	No increased risk of stroke within 3, 7, 14, 21, or 30 days of influenza vaccination. aHR within 30 days: 0.66 (95% CI: 0.65-0.68)

Outcome: Exacerbation of immunocompromising or autoimmune condition

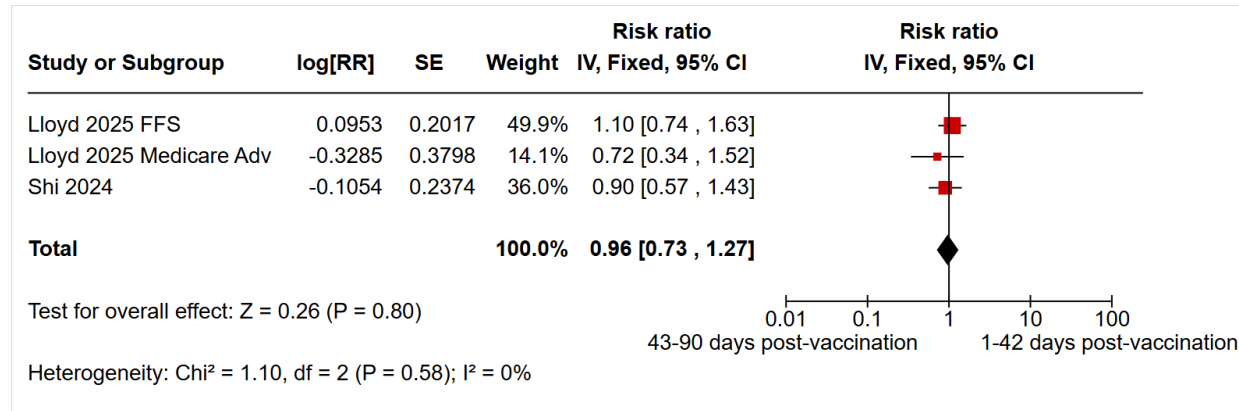
Author, year of publication	Location, dates of data collection	Study design	Population	Intervention	Comparator	Results & Notes
Grimaldi 2023	France; January 1, 2007 – December 31, 2017	Nested case-crossover analysis	Multiple sclerosis (MS) patients	At risk window: 60 days before and until the index date of MS flare-up	Control window: 60-day time windows immediately preceding the at-risk time windows	Found no association between influenza vaccination and risk of hospitalization due to MS flares; aOR: 0.98 (95% CI, 0.88-1.09). 431 out of 31712 (1.36%) patients in at-risk time windows compared to 1634 out of 116,901 patients (1.4%) with flares during control time windows

Nakafero 2024	UK; September 1, 2018 – August 31, 2019	Self-controlled case series	Influenza vaccinated adults with inflammatory bowel disease (IBD) and at least one flare	Baseline period: from September 1, 2018 to 15 days pre-vaccination, and from 90 days post-vaccination to August 31, 2019, date of leaving GP surgery, date of death or the latest date of data collection	Exposure period: vaccination to 90 days	Study found no increased risk of influenza vaccination and excess IBD flares; (aIRR 0.68, 95% CI 0.46 to 1.02)
Zawiasa-Bryszewska 2025	Poland; October 2018 - May 2019	Prospective cohort	Adults with ≥6 months post kidney transplant	Vaccination	No vaccination	No significant difference between both groups in changes of eGFR, Serum creatinine (sCr) and occurrence of clinically significant proteinuria was observed. None amongst the vaccinated group experienced leucopenia, neutropenia, or thrombocytopenia after vaccination.
Soe 2025	Canada; September 2022- October 2022	Prospective cohort	Adolescents and adults ≥15yrs with autoimmune conditions	Vaccination	No vaccination	No cases of disease flare or exacerbation of underlying conditions were reported in the influenza alone recipients nor in the unvaccinated individuals with autoimmune diseases.

Supplemental Figure 1. Pooled Odds Ratio (OR) for Influenza-associated hospitalization in Older Adults from test-negative case-control studies



Supplemental Figure 2. Pooled incidence rate ratios (IRRs) for risk of Guillain-Barre syndrome following Influenza vaccination from self-controlled case series



Supplemental Figure 2. Risk of Bias Assessment of studies included for Influenza

	Risk of bias domains							Overall
	D1	D2	D3	D4	D5	D6	D7	
Lewis 2025	-	+	-	+	+	+	+	-
Gharpure 2025	-	+	-	+	✗	+	+	✗
Martinez-Baz 2025	-	+	+	+	+	+	+	-
Rose 2025	-	✗	-	+	+	+	+	✗
Emborg 2025	-	+	+	+	+	+	+	-
Tenforde 2024	-	+	+	+	+	+	+	-
Maurel 2024	-	+	-	+	+	+	+	-
Frutos 2025	-	+	-	+	+	+	+	-
Silva-Afonso 2025	-	+	+	+	+	+	+	-
Frutos 2024	-	+	-	+	+	+	+	-
Acuti Martellucci 2025	-	-	+	+	+	+	+	-
Lloyd 2025	-	+	+	+	+	+	+	-
Shi 2024	-	+	+	+	+	+	+	-
Tanaka 2024	-	+	+	+	+	+	+	-
Grimaldi 2023	-	+	+	+	+	+	+	-
Nakafero 2024	+	+	✗	+	+	+	+	✗
Zawiasa-Bryszewska 2025	✗	-	+	+	+	+	+	✗
Domnich 2025	-	+	+	+	+	+	+	-
Soe 2025	-	✗	-	+	+	+	+	-

Domains:
D1: Bias due to confounding.
D2: Bias due to selection of participants.
D3: Bias in classification of interventions.
D4: Bias due to deviations from intended interventions.
D5: Bias due to missing data.
D6: Bias in measurement of outcomes.
D7: Bias in selection of the reported result.

Judgement
✗ Serious
- Moderate
+ Low

IDSA Conflict of Interest

Definitions

Affected Company:

An affected company is any commercial entity—including those involved in the development, manufacture, marketing, or distribution of pharmaceutical products, medical devices, diagnostics, or insurance services—that has, or is developing, a product, technology, or service that is directly related to the topic under consideration in the guideline.

- A non-profit organization is not considered a commercial entity, unless it engages in commercial activities or has financial interests that could be affected by the guideline topic.
- Governmental entities are not considered commercial entities. However, they may still present other types of potential conflicts, particularly intellectual or institutional conflicts, depending on the guideline context. IDSA will not consider governmental entities affected companies.

Related Products & Services:

For guidelines on RSV, influenza, and COVID-19 vaccination, companies should be considered affected if they have or are developing any product, technology, or service that could influence clinical decision-making or patient care related to these vaccines.

TABLE 1. RELATIONSHIPS PROHIBITED

1. Royalties, licensing fees, patents from any product or device related to the topic under consideration. This includes patents, the rights for which have been turned over to an institution but from which the individual benefits.
2. Serving as an officer, board of directors member or employee of any device, insurance, pharmaceutical or diagnostic product or commercial entity with a product or device related to the topic under consideration.
3. Representation of any commercial healthcare-related entity (with a product or device related to the topic under consideration) before FDA advisory committees or in any other interactions such an entity may have with FDA.
4. Any honoraria, gifts, or other payments (includes funds for travel/hotel) directly received from any relevant commercial healthcare-related entity (US and International). This includes participation in speakers bureaus labeled as promotional and/or when any associated presentation is content-restricted in any way, including, but not limited to, the requirement to use only company-provided material; paid for by any mechanism other than an unrestricted educational grant to a CME-approved (or other educational) entity; and/or product-specific.
5. Any activity not sponsored by the research arm of the company will NOT be allowed. For example, an advisory board sponsored by the marketing division, even if concentrating on “future research directions,” will NOT be allowed. In addition, consulting on post-research regulatory issues will NOT be allowed.

6. Stock or equity in any commercial healthcare-related entities (excludes diversified funds) related to the topic.
7. Advisory or consulting roles with an affected company will disqualify an individual from serving on the panel if: (a) Compensation is paid directly to the individual, regardless of the subject matter, or (b) The advisory or consulting work relates to the guideline topic, regardless of whether payment is made to the individual or their institution.
8. Serving as an investigator on a research study that is supported or sponsored by an affected company will disqualify an individual from serving on the panel if: (a) Compensation is paid directly to the individual, or (b) The research is related to the guideline topic, regardless of whether payment is made to the individual or their institution.

TABLE 2. RELATIONSHIPS ALLOWED

1. Advisory/consultancies with an affected company is allowed when the role is <i>unrelated</i> to the guideline topic and payment goes to the institution—not the individual. Exception, Chair(s)
2. Serving as an investigator on a research study that is supported or sponsored by an affected company is allowed if the study is <i>unrelated</i> to the guideline topic and payment goes to the institution—not the individual. If you are a panel chair and conduct research, IDSA will require a co-chair with no relationships.
3. Presentations at national or international meetings provided that: a. Presentations are non-promotional and there should be no involvement of industry in presentation content. There should be complete intellectual independence with regard to presentation content. b. There is NO direct payment by industry to an individual for his/her participation (any industry support of speaker expenses must be through a third-party organization (e.g., IDSA, ICAAC, ATS, etc.), institution, CME, or other educational provider. Exception, Chair(s)

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1. Scott J, Abers MS, Marwah HK, et al. Updated Evidence for Covid-19, RSV, and Influenza Vaccines for 2025-2026. N Engl J Med **2025**.
2. Senerth E, Sheikholeslamian SM, Sivakumaran K, al. e. Influenza vaccine effectiveness and safety for the 2026-2027 respiratory season. JAMA **2026**.