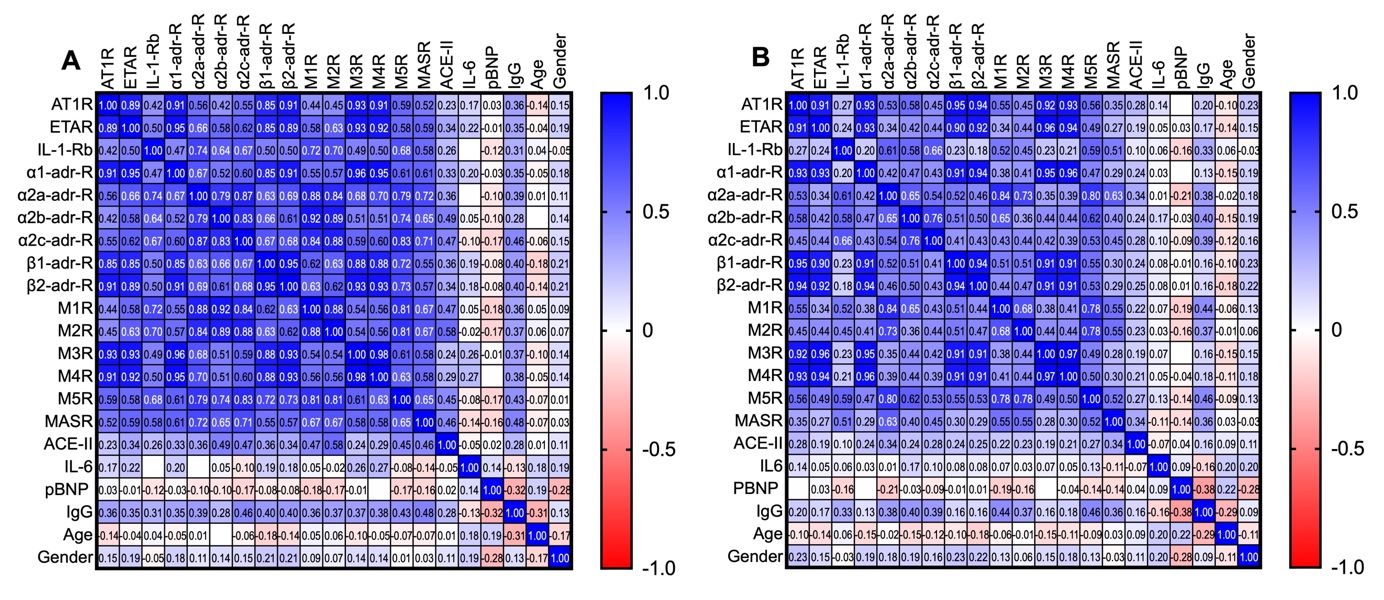
**Table S1: Vaccination History of Participants**

|  |  |
| --- | --- |
|  | **N** |
| **mRNA Vaccination preceeding PACVS Onset** |  |
| Moderna (SpikeVax) | 32 |
| BioNTech (Comirnatry) | 159 |
| **Vaccination Cycles before PACVS Onset** |  |
| 1 cycle | 47 |
| 2 cycles | 96 |
| 3 cycles | 48 |
| **Vaccination Regimen before PACVS Onset** |  |
| 1x BioNTech  2x BioNTech  3x BioNTech | 41  72  27 |
| 1x Moderna  2x Moderna  3x Moderna | 6  11  6 |
| Moderna/ BioNTech  2x BioNTech/ Moderna  2x Moderna/ BionNTech | 1  8  2 |
| Astra-Zeneca/ BioNTech  Astra-Zeneca/ Moderna  Astra-Zeneca/ 2x BioNTech | 7  1  5 |
| Janssen/ BioNTech  Janssen/ Moderna | 3  1 |

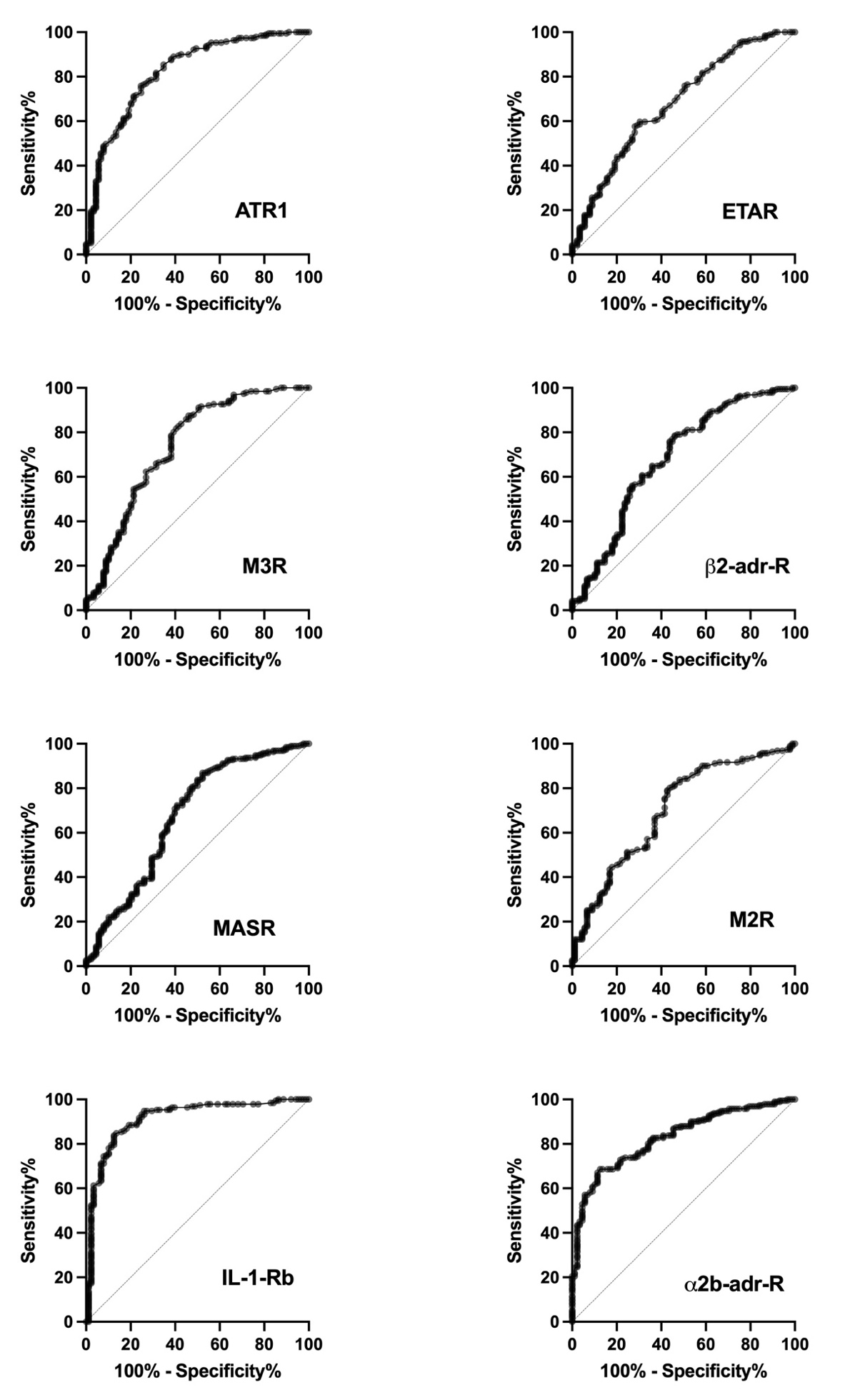
**Table S2: Meta Data and In-/Exclusion Criteria of Controls and PACVS Subjects**

|  |  |
| --- | --- |
| **Controls**  Inclusion:  Exclusion: | N = 89 , Gender: 71 female, 18 male (p<0.001)  Age (years, range/mean/median): 21 - 64, 39/49 (p<0.0001)  Initial dual vaccination with Spikevax (Moderna), spaced six weeks  Monitoring period: six months after second vaccination  Donation of serum sample 48 h before first and 6 months after second vaccination  De novo disease symptoms during monitoring period:   * Immunological/ rheumatological disorders (myalgia, RBV-reactivation, inflammation, arthritis) * Cardiovascular disorder (pressure crisis, heart insufficiency, arrhythmia, sinus tachycardia, ischemia) * Neurologic disorder (cognitive impairment, peripheral nerve dysfunction, muscular fibrillation or paresis) * Other disease or health condition entailing occupational impairment   Increased laboratory markers in post-vaccination serum:   * IL-6 > 7 pg/ml, CRP > 0.5 mg/dl, pBNP > 125 pg/ml, TpT > 11 ng/ml, IgG < 700, >1600 mg/dL * SARS-CoV-2 nucleocapsid antibodies indicative of passed SARS-CoV-2 infection |
| **Participants.**  Inclusion:  Exclusion: | N = 191, Gender: 159 females, 32 males (p<0.001)  Age (years, range, mean/median): 18 - 66, 40/39 years (p<0.0001)  Development of symptoms or disease after SARS-CoV-2 vaccination with mRNA-vaccine (Moderna or Pfizer/BioNTech)  Established or suspected diagnosis of syndrome or ≥3 symptoms thereof1  Start of symptoms ≥ 1 week after first and/or ≤ 4 weeks after last vaccination  Persistent symptoms for ≥ 5 months  Completion of on-line query  Donation of serum sample at ≥ 5 months after onset of symptoms  Diseases/ syndromes (only included if occurring/diagnosed1 after SARS-CoV-2 vaccination):   * Myalgic Enzephalomyelitis/Chronic Fatigue Syndrome (ME/CFS) * Post-Covid-19/long Covid-19 syndrome in the absence of SARS-CoV-2-infection * Post vaccination syndrome * Postural Tachycardia Syndrome (POTS) * Mastcell activation syndrome (MCAS) * Fibromyalgia/chronic pain syndrome * Peri-/Myocarditis * Thrombosis * Small fiber neuropathy (SFN) * Bell’s palsy * Guillain-Barré syndrome (GBS) * Vaccine-induced hyperinflammation * Other adverse vaccination reactions including herpes zoster   Included symptoms (≥3):   * Immunological/ rheumatological disorders (e.g. myalgia, joint pain, swollen/painful lymph nodes) * Cardiovascular disorder (e.g. orthostatic intolerance, arrhythmia, sinus tachycardia, palpitations) * Neurologic disorder (e.g. cognitive impairment, peripheral nerve dysfunction, sensomotor paresis) * Other consensus symptoms of ME/CSF [7]   Potentially confounding chronic medication pre- and post-vaccination   * anti-psychotic, anti-depressive * immunosuppressive, anti-proliferative, anti-inflammatory * anti-biotic * immunomodulative treatment after vaccination   Potentially confounding health condition existing before vaccination   * immunological disease (e.g. Post-COVID, Long-COVID, rheumatic disease * musculoskeletal disease (e.g. ME/CFS, Fibromyalgia, Complex regional pain syndrome) * neurological disease (e.g. Multiple Sclerosis, Neuromyelitis Optica spectrum disorders, GBS, Chronic inflammatory demyelinating polyneuropathy (CIPD), Polyneuropathy other origin than CIPD) * Psychiatric disorder (e.g. Depression, Anxiety disorder, Post-traumatic stress disorder, Obsessive compulsive disorder) * Malignancies, transplantations   Symptoms following other vaccination (incl. non-mRNA SARS-CoV-2 vaccination) |

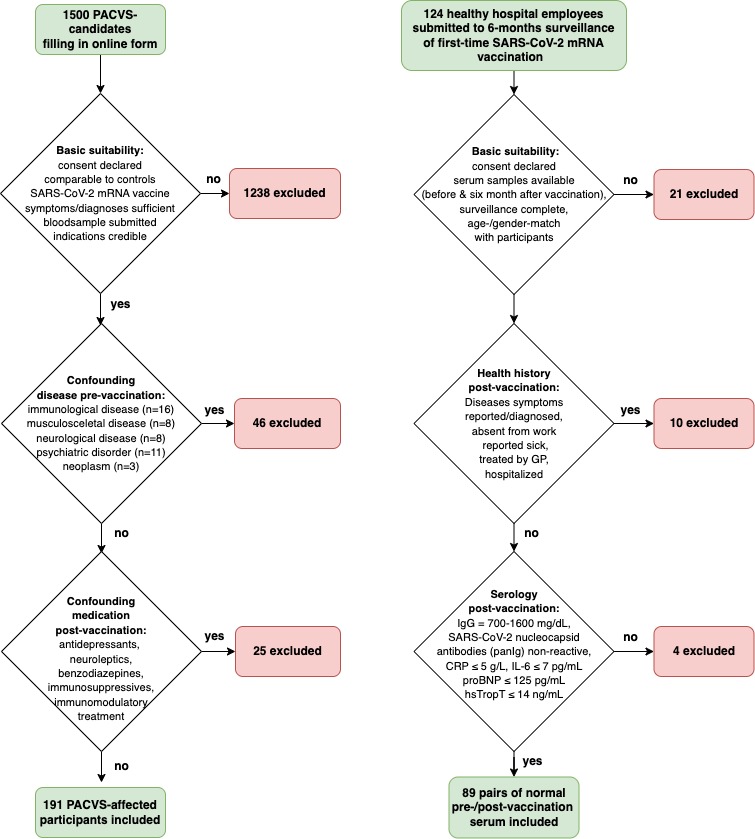
1By a physician in hospital or general practice



**Figure S1. Co-variance of Receptor Antibodies in Serum of healthy Volunteers (n=89):** Age, gender and serum values determined 48 h before first (A) and 6 months after second (B) SARS-CoV-2 vaccination (Spikevax, Moderna). Numerical values: Spearmans’s R, values ≥ 0.7 considered significant (p < 0.0001).



**Figure S2. ROC curves of Receptor Antibodies discriminating PACVS Subjects from post-Vaccination Controls**

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**Figure S3. Flow charts of inclusion of study participants (left) and controls (right).** In- /exclusion criteria are listed in Suppl. Tab. 1. Serological surveillance of healthy hospital employees used as source for controls as described in [37]