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| 1. Record Nr. | UNINA9911034952703321 |
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| Titolo | Convalescent Plasma and Other Antibody Therapies for Infectious Diseases : Lessons learned from COVID-19 and Future Prospects // edited by Nigel Paneth, Michael J. Joyner, Arturo Casadevall |
| Pubbl/distr/stampa | Cham : , : Springer Nature Switzerland : , : Imprint : Springer, , 2025 |
| ISBN | 3-031-87167-7 |
| Edizione | [1st ed. 2025.] |
| Descrizione fisica | 1 online resource (375 pages) |
| Collana | Current Topics in Microbiology and Immunology, , 2196-9965 ; ; 443 |
| Altri autori (Persone) | JoynerMichael J CasadevallArturo |
| Disciplina | 615.37 |
| Soggetti | Immunology Medical microbiology Pharmacology Virology Applied Immunology Medical Microbiology |
| Lingua di pubblicazione | Inglese |
| Formato | Materiale a stampa |
| Livello bibliografico | Monografia |
| Nota di contenuto | THE LOGIC AND HISTORY OF PASSIVE IMMUNITY AND ANTIBODY THERAPIES -- A BRIEF HISTORY OF POLYCLONAL ANTIBODY THERAPIES AGAINST BACTERIAL AND VIRAL DISEASES BEFORE COVID-19 -- THE IMPORTANCE OF ANTIBODY TITER DETERMINATION TO THE EFFECTIVE USE OF CONVALESCENT PLASMA -- CONVALESCENT PLASMA AND THE US EXPANDED ACCESS PROGRAM: A PERSONAL NARRATIVE -- The safety profile of COVID-19 convalescent plasma -- The Importance of Geographic Proximity of Convalescent Plasma Donors -- Evidence for the efficacy of COVID-19 convalescent plasma -- CONVALESCENT PLASMA FOR IMMUNOCOMPROMISED PATIENTS -- MONOCLONAL ANTIBODY THERAPIES AGAINST SARS-CoV-2: PROMISES AND REALITIES -- Hyperimmune Globulins in COVID-19 -- THE ROLE OF THE PATIENT ADVOCATE DURING A PANDEMIC: THE CASE OF CONVALESCENT PLASMA -- BLOOD BANKING CAPACITY IN LOW-AND MIDDLE-INCOME COUNTRIES: COVID-19 CONVALESCENT PLASMA IN CONTEXT -- HEMOCLEAR: A PRACTICAL AND COST-EFFECTIVE ALTERNATIVE TO |

CONVENTIONAL CONVALESCENT PLASMA RETRIEVAL METHODS --
GENERATING THE EVIDENCE BASE FOR CONVALESCENT PLASMA USE
FOR A NEW INFECTIOUS DISEASE -- CONVALESCENT PLASMA AND
OTHER ANTIBODY THERAPIES FOR INFECTIOUS DISEASES – LESSONS
LEARNED FROM COVID-19 AND FUTURE PROSPECTS -- MONOCLONAL
ANTIBODIES AND HYPERIMMUNE IMMUNOGLOBULINS IN THE NEXT
PANDEMIC -- USING PASSIVE ANTIBODY THERAPIES IN THE NEXT
PANDEMIC.

Sommario/riassunto

This volume reviews key scientific principles and practices of passive antibody therapy for the treatment of infectious diseases. The main focus is on convalescent plasma, which is the most useful therapeutic option early in an epidemic, and may be especially important in low- and middle-income countries. The book's first section reviews the history of passive antibody therapies prior to the COVID pandemic, while the second section assesses convalescent plasma use during the COVID pandemic including evidence for safety and effectiveness, factors affecting efficacy, and the importance of convalescent plasma treatment of COVID-19 infections in the immunosuppressed. This section also addresses the roles played in the pandemic by monoclonal antibodies and hyperimmune globulins. Section three discusses the logistics of retrieving, storing and delivering convalescent plasma for therapy, and section four considers the role of passive antibody therapies in the event of a new pandemic involving an unknown microbial pathogen. In March 2020 the editors of this volume founded the national COVID-19 convalescent plasma project (ccpp19), an association of academic physicians organized to investigate the safety and effectiveness of convalescent plasma and to facilitate access to its use in the treatment of this new international pandemic. Since that time, the project has produced more than 100 papers on almost every aspect of convalescent plasma usage in COVID-19 – treatment protocols, randomized trials, considerations of safety, conditions required for effectiveness, variability in use geographically and over time, application to vulnerable populations, regulatory issues, impact on overall COVID-19 mortality in the US and much else. At the same time, another form of antibody therapy – monoclonal antibodies – was being shown effective for out-patient use in COVID-19, confirming the principle of the value of antibody therapy in the early stages of disease, but lost effectiveness with viral mutation. A third form of antibody therapy – hyperimmune globulin, a preventive therapy with an excellent historical record of efficacy in several infectious diseases - holds great potential but was not effectively developed for COVID-19. This edited work brings together the central findings gained over the past years about passive antibody use and serves as an indispensable guide to best practices in the use of antibody therapies.