Record Nr. UNINA9910964256303321 Glutamate-related biomarkers in drug development for disorders of the **Titolo** nervous system: workshop summary // Diana E. Pankevich, Miriam Davis, and Bruce M. Altevogt, rapporteurs; Forum on Neuroscience and Nervous System Disorders, Board of Population Health and Public Health Practice, Institute of Medicine of the National Academies Washington, D.C., : National Academies Press, 2011 Pubbl/distr/stampa **ISBN** 0-309-21224-3 1-283-21345-1 9786613213457 0-309-21222-7 Edizione [1st ed.] Descrizione fisica 1 online resource (74 p.) Altri autori (Persone) PankevichDiana E DavisMiriam AltevogtBruce M Disciplina 616.8061 Soggetti Glutamic acid - Pharmacokinetics Central nervous system - Diseases Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Description based upon print version of record. Note generali Nota di bibliografia Includes bibliographical references and index. Nota di contenuto ""Front Matter""; ""Reviewers""; ""Contents""; ""1 Introduction""; ""2 Overview of the Glutamatergic System""; ""3 Glutamate Biomarkers""; ""4 Treatment Implications of Biomarkers""; ""5 Challenges and Opportunities""; ""Appendix A: References""; ""Appendix B: Registered Attendees""; ""Appendix C: Agenda"" Glutamate is the most pervasive neurotransmitter in the central nervous Sommario/riassunto system (CNS). Despite this fact, no validated biological markers, or biomarkers, currently exist for measuring glutamate pathology in CNS disorders or injuries. Glutamate dysfunction has been associated with an extensive range of nervous system diseases and disorders. Problems with how the neurotransmitter glutamate functions in the brain have been linked to a wide variety of disorders, including schizophrenia, Alzheimer's, substance abuse, and traumatic brain injury. These conditions are widespread, affecting a large portion of the United

States population, and remain difficult to treat. Efforts to understand, treat, and prevent glutamate-related disorders can be aided by the identification of valid biomarkers. The Institute of Medicine's Forum on Neuroscience and Nervous System Disorders held a workshop on June 21-22, 2010, to explore ways to accelerate the development, validation, and implementation of such biomarkers. This book investigates promising current and emerging technologies, and outlines strategies to procure resources and tools to advance drug development for associated nervous system disorders. Moreover, this report highlights presentations by expert panelists, and the open panel discussions that occurred during the workshop.