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| Book Name: | [**Medical Science: Trends and Innovations**](https://www.bookpi.org/bookstore/product/medical-science-trends-and-innovations-vol-1/) |
| Manuscript Number: | **Ms\_BPR\_4338** |
| Title of the Manuscript: | **The Role of Synaptic Cargo Transporters in Regulating Neuronal Excitation/Inhibition Balance in Autism Spectrum Disorders: A Focus on Syntabulin-syntaxin 1 A/B Axis** |
| Type of the Article | **Book Chapter** |

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| PART 1: Comments | | |
|  | Reviewer’s comment | Author’s Feedback *(Please correct the manuscript and highlight that part in the manuscript. It is mandatory that authors should write his/her feedback here)* |
| **Please write a few sentences regarding the importance of this manuscript for the scientific community. A minimum of 3-4 sentences may be required for this part.** | This manuscript important for the scientific community as it addresses a critical aspect of neuronal function, specifically the role of the syntabulin-syntaxin 1A/B axis in synaptic cargo transport and its implications for autism spectrum disorders. By shedding light on the mechanisms regulating excitation/inhibition balance, the manuscript provides valuable insights into potential synaptic dysfunction in ASDs. The focus on this pathway opens avenues for further research and could contribute to identifying novel therapeutic targets for managing these disorders. |  |
| **Is the title of the article suitable?**  **(If not please suggest an alternative title)** | The current title, "The Role of Synaptic Cargo Transporters in Regulating Neuronal Excitation/Inhibition Balance in Autism Spectrum Disorders: A Focus on Syntabulin-syntaxin 1 A/B Axis," is informative but somewhat lengthy and could be streamlined for clarity and impact.  Here are some alternative suggestions:   1. **"Synaptic Cargo Transporters and the Syntabulin-Syntaxin 1 Axis: Implications for Autism Spectrum Disorders"** 2. **"The Syntabulin-Syntaxin 1 Axis in Autism: Insights into Neuronal Excitation/Inhibition Balance"** |  |
| Is the abstract of the article comprehensive? Do you suggest the addition (or deletion) of some points in this section? Please write your suggestions here. | The abstract provides a good overview of the topic but could benefit from better organization and focus to make it more comprehensive and engaging. Here are my suggestions for improvement: Additions:  1. **Clear Objective Statement:** Clearly state the purpose of the review in the opening lines. For example, “This review examines the role of syntabulin in synaptic cargo transport and its impact on excitation/inhibition balance in autism spectrum disorders (ASDs).” 2. **Relevance to Autism:** Emphasize the significance of syntabulin-syntaxin interactions specifically in the context of ASDs early in the abstract. 3. **Potential Applications:** Include a brief mention of how this knowledge could inform therapeutic strategies for ASDs.  Deletions/Streamlining:  1. **Technical Detail:** The mention of specific genes and chromosome locations (e.g., "The gene for Syntabulin is found on human chromosome 8q23.2...") may not be essential in the abstract, as this level of detail can be explored in the main text. 2. **Redundancy:** Some sentences repeat similar ideas, such as the role of syntabulin as a linker molecule and its involvement in syntaxin transport. Consolidating these points will improve clarity. |  |
| **Is the manuscript scientifically, correct? Please write here.** | The manuscript appears to be scientifically correct, as it discusses established concepts, mechanisms, and findings related to autism, synaptogenesis, and neurochemical aspects of synaptic cargo transporters, referencing relevant studies and authors. It provides detailed descriptions of syntabulin, SNAP47, GRIA3/4, and GAP43, supporting their roles in neurodevelopmental disorders like autism.  However, to ensure scientific accuracy and clarity, the following points should be considered:   1. **Lack of Cohesion in Argument Flow**: While the manuscript is rich in content, the flow between sections may not be seamless, which can make it difficult for readers to follow the logical progression of ideas. Adding clear transitions between concepts or subsections might improve readability. 2. **Insufficient Recent References**: Some references may not include the most recent studies (2023–2025). Incorporating the latest findings would enhance the manuscript’s relevance and impact. 3. **Limited Discussion on Therapeutic Implications**: Although the manuscript discusses neurochemical transporters and synaptogenesis, there is minimal focus on how this knowledge can translate into therapeutic interventions or diagnostic tools, especially for autism spectrum disorders. 4. **Underexplored Mechanistic Pathways**: The manuscript briefly touches on several pathways but lacks in-depth exploration of specific mechanisms that link synaptogenesis and neurochemical transporters to autism. 5. **Simplification for Broader Audience**: The manuscript assumes a high level of familiarity with neurobiological terms and concepts, which might limit accessibility for readers from diverse scientific backgrounds. Simplifying or explaining key terms and processes would broaden its reach. 6. **No Mention of Potential Controversies**: In some areas, like the role of specific transporters (e.g., GRIA3/4), there might be conflicting evidence in the literature. The manuscript could benefit from addressing such controversies to provide a balanced perspective. 7. **Methodological Gaps in Supporting Studies**: If specific studies are cited without discussing their limitations, the manuscript might give an overly optimistic impression. Including critiques of cited research could strengthen the scientific rigor. 8. **Visual Aids**: The manuscript lacks figures, diagrams, or tables that could visually summarize complex processes or data, making it less engaging and harder to digest.   Addressing these gaps can enhance the manuscript's quality, clarity, and impact on the scientific community. |  |
| **Are the references sufficient and recent? If you have suggestions of additional references, please mention them in the review form.**  **-** | Here are some points highlighting potential lacunas in the manuscript based on the references provided:   1. **Duplicate References**:    * The manuscript includes duplicate references such as "Bury, L. A., & Sabo, S. L. (2011)," which appear twice. This repetition may suggest a lack of careful reference management. 2. **Incomplete Citation Details**:    * Some references lack crucial details. For example, certain citations mention "et al." without listing all authors for the first time (e.g., Su, Q., Cai, Q., Gerwin, C., et al. (2004)), which violates common referencing guidelines. 3. **Mismatched Citation Style**:    * While most references adhere to the style, some (e.g., Ying, Y., et al. (2012)) show formatting inconsistencies, such as missing italicization for journal titles. 4. **Irrelevant or Underexplored Citations**:    * Some references, such as those discussing Xenopus embryonic development or zebrafish body axis patterning (e.g., Colozza & De Robertis (2014), Campbell et al. (2015)), may not be directly relevant to the manuscript’s main focus if it emphasizes neurological pathways. 5. **Over-reliance on a Few Authors**:    * The manuscript appears to heavily rely on a small set of authors like Cai, Q., and Sheng, Z. H., with multiple papers cited. This could indicate a lack of diversity in the cited literature. 6. **Outdated References**:    * A significant portion of the references date back over a decade (e.g., Su et al. (2004), Frederick & Shaw (2007)), which may limit the incorporation of the most recent advancements in the field. 7. **Unexplained Contextual Relevance**:    * Certain references related to specific gene mutations and their role in conditions like autism or epilepsy (e.g., Ke et al. (2023)) might require further contextualization within the manuscript to clarify their relevance. 8. **Lack of Comprehensive Review**:    * Important recent studies on the role of syntabulin and SNARE complexes in neurodegenerative diseases or their mechanistic contributions might be missing, suggesting the need for a broader literature review. 9. **Incomplete URLs**:    * Some DOIs or URLs, such as "https://doi.org/10.3760/cma.j.issn.1003-9406.2019.08.019," may be incorrectly formatted or incomplete, potentially leading to difficulties in accessing the source. |  |
| Is the language/English quality of the article suitable for scholarly communications? | The language quality of the article appears to be generally appropriate for scholarly communication, as it utilizes domain-specific terminology and structured citation formatting expected in academic settings. However, there are a few areas where improvements can enhance clarity, conciseness, and consistency. Below are some recommendations:   **Clarity and Flow**:   * Sentences with complex structures can benefit from simplification. For example: "Atomoxetine, parent training, and their combination in children with autism spectrum disorder and attention-deficit/hyperactivity disorder." Could be revised to: "The combined effects of atomoxetine and parent training on children with autism spectrum disorder and ADHD."    **Grammatical Consistency**:   * Ensure proper subject-verb agreement and verb tense consistency. For example: "Defects in synaptic cargo associate with autism-like dysfunction and social behavioral traits." Should be: "Defects in synaptic cargo are associated with autism-like dysfunctions and social behavioral traits."    **Transition Words**:   * Use more linking phrases (e.g., "therefore," "in contrast") to improve the flow between ideas |  |
| Optional/General comments |  |  |

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| **PART 2:** | | |
|  | **Reviewer’s comment** | **Author’s comment** *(if agreed with reviewer, correct the manuscript and highlight that part in the manuscript. It is mandatory that authors should write his/her feedback here)* |
| **Are there ethical issues in this manuscript?** | *(If yes, Kindly please write down the ethical issues here in details)* |  |

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| **Reviewer Details:** | |
| Name: | **Shivani Chib** |
| Department, University & Country | **Central University of Punjab, India** |