

Typically abstracts follow the format of:

- 1-2 sentences introducing the unmet need (in this case it would be glioblastoma/affected populations and the unmet treatment needs)
- 1-2 sentences introducing the proposed solution
- 1-2 sentences on the methods used
- 1-2 sentences summarizing the study results
- 1-2 sentences on conclusions

Proteins play a crucial role in the growth and development of cells, by controlling cell division, metabolism, and regulation of materials and information entering the cell. Here, we manipulate the relationship between the protein and cells in order to terminate the growth of the glioblastoma tumor. To do this, we aim to utilize a transporter protein, which will have absorbed or consumed a certain amount of hydroxychloroquine, to be able to recognize signals or signs of glioblastoma. This transporter protein would bypass the cell membrane, enter the cancerous cell, and dissolve, leaving the hydroxychloroquine to modulate autophagy occurring in the cell. This modulation would prevent cell healing and regeneration, leading to cell death. Instead of using modified bacteria, which would have a higher risk-factor, proteins provide a safer and more controlled alternative. After dissolving, the hydroxychloroquine would modulate, and eventually kill the cell.