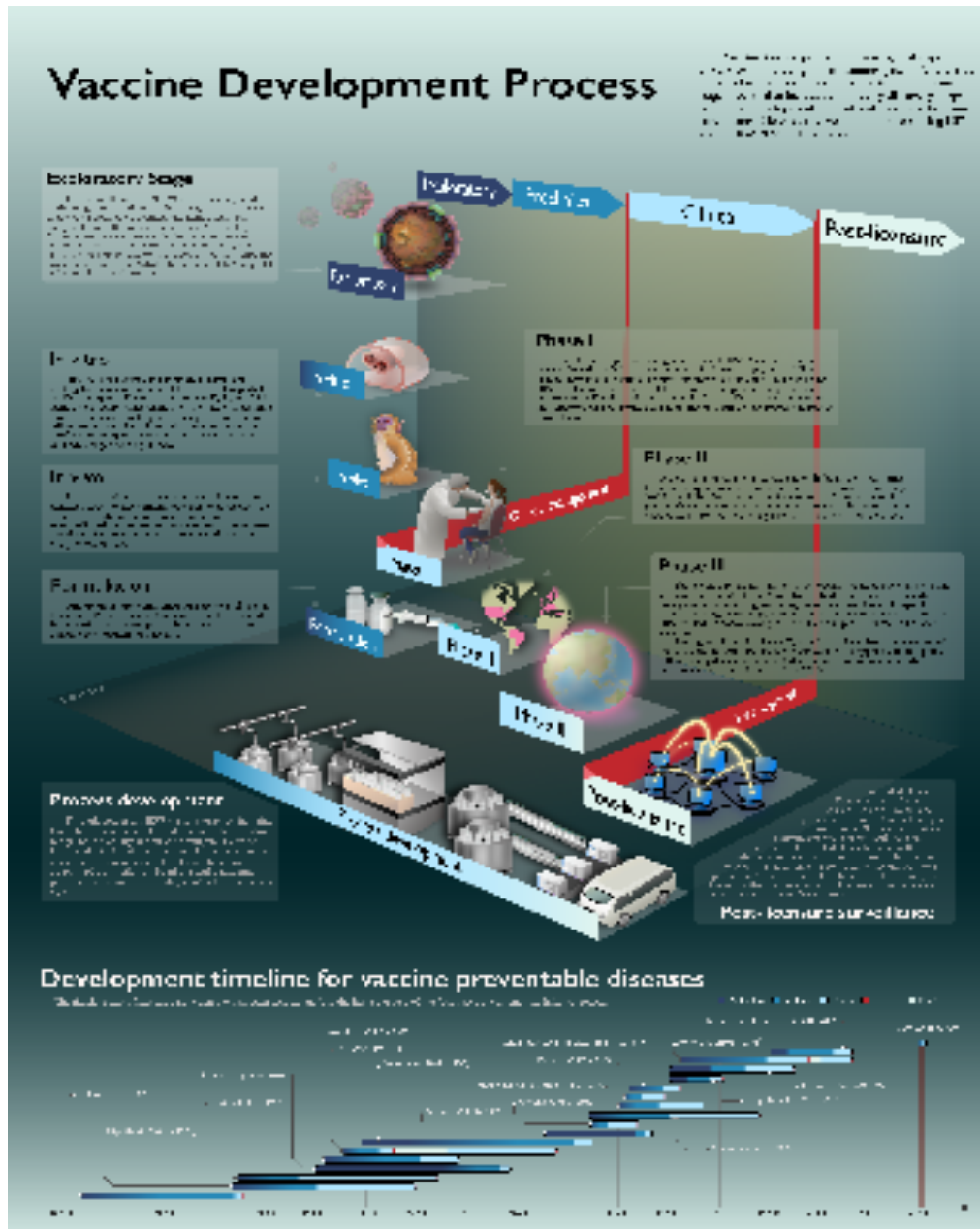


INFOGRAPHIC

Vaccine Development Process

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REFERENCES

- Shi, L., Sings, H. L., Bryan, J. T., Wang, B., Wang, Y., Mach, H., Kosinski, M., Washabaugh, M. W., Sitrin, R. Barr, E. (2006). GARDASIL®: Prophylactic Human Papillomavirus Vaccine Development - From Bench Top to Bedside. *Clinical Pharmacology & Therapeutics*, 81(2), 259-264. doi:10.1038/sj.clpt.6100055.
- Cunningham, A. L., Garçon, N., Leo, O., Friedland, L. R., Strugnell, R., Laupèze, B., Doherty, M., & Stern, P. (2016). Vaccine development: From concept to early clinical testing. *Vaccine*, 34(52), 6655-6664. https://doi.org/10.1016/j.vaccine.2016.10.016.
- Callaway, E., (2020, April 28). The race for coronavirus vaccines: a graphical guide. *Nature News Feature*. https://www.nature.com/articles/d41586-020-01221-y.
- Siddiqui, M. A. A., & Perry, C. M. (2006). Human Papillomavirus Quadrivalent (types 6, 11, 16, 18) Recombinant Vaccine (Gardasil®). *Drugs*, 66(9), 1263-1271. https://doi.org/10.2165/00003495-200666090-00008.
- Villa, L. L., Costa, R. L., & Petta, C. A. et al. (2005). Prophylactic quadrivalent human papillomavirus (types 6, 11, 16, and 18) L1 virus-like particle vaccine in young women: a randomised double-blind placebo-controlled multicentre phase II efficacy trial. *The Lancet Oncology*, 6(5), 271-278. https://doi.org/10.1016/S1470-2045(05)70101-7.
- Buckland, B. C. (2005). The process development challenge for a new vaccine. *Nature Medicine*, 11, S16-S19. https://doi.org/10.1038/nm1218.
- Block, S. L., Brown, D. R., & Chatterjee, A. et al. (2010). Clinical Trial and Post-Licensure Safety Profile of a Prophylactic Human Papillomavirus (Types 6, 11, 16, and 18) L1 Virus-Like Particle Vaccine. *The Pediatric Infectious Disease Journal*, 29(2), 95-101. doi: 10.1097/INF.0b013e3181b77906.
- Serdobova, I. & Kieny, MP. (2011). Assembling a Global Vaccine Development Pipeline for Infectious Diseases in the Developing World. *American Journal of Public Health*, 96, 1554-1559. https://doi.org/10.2105/AJPH.2005.074583.