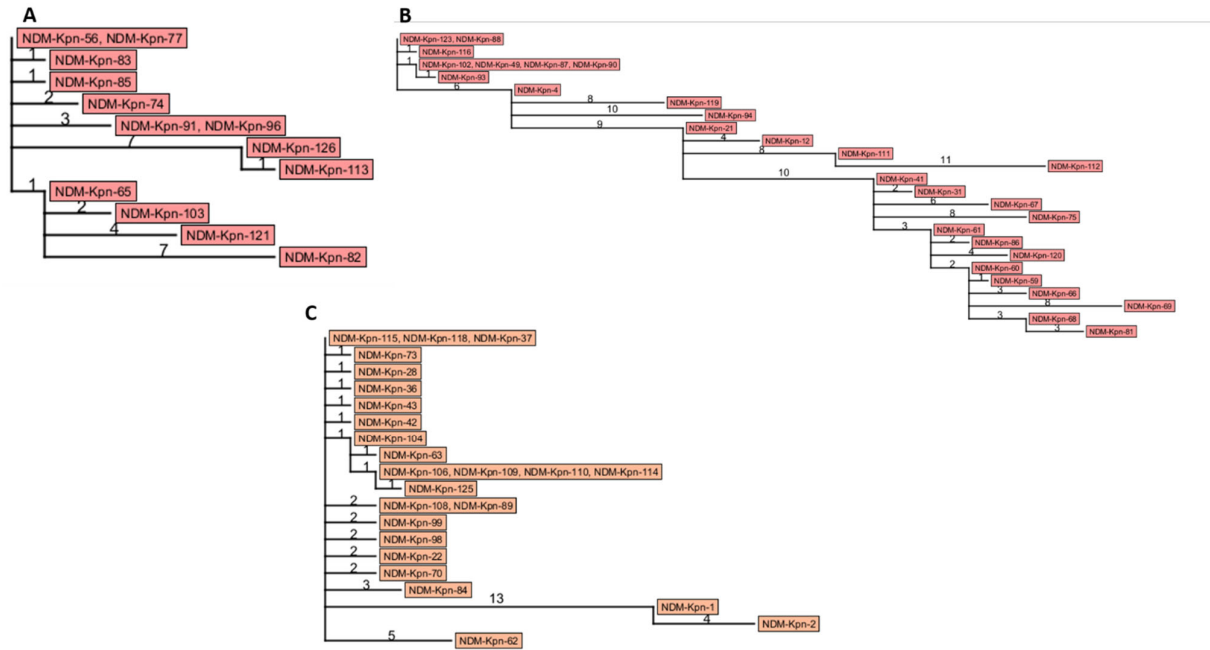


Figure S1. Phylogenetic Tree relating to the most represented ¹CTs.



A. CT1:

NDM-Kpn-56: *bla*_{NDM-1}, *bla*_{OXA-48}, *bla*_{CTX-M-1}, *ybt10*, *ICEKp4*, virulence score 1, ¹H-1, 2023

NDM-Kpn-77: *bla*_{NDM-1}, *bla*_{OXA-48}, *bla*_{CTX-M-15}, *ybt10*, *ICEKp4*, virulence score 1, H-1, 2023

NDM-Kpn-83: *bla*_{NDM-1}, *bla*_{OXA-48}, *bla*_{CTX-M-15}, *ybt1*, *ICEKp4*, virulence score 1, H-6, 2023

NDM-Kpn-85: *bla*_{NDM-1}, *bla*_{OXA-48}, *bla*_{CTX-M-15}, *ybt1*, *ICEKp4*, virulence score 1, H-6, 2023

NDM-Kpn-74: *bla*_{NDM-1}, *bla*_{OXA-48}, *bla*_{CTX-M-15}, *ybt10*, *ICEKp4*, virulence score 1, H-6, 2023

NDM-Kpn-91: *bla*_{NDM-1}, *bla*_{OXA-48}, *bla*_{CTX-M-15}, *ybt1*, *ICEKp4*, virulence score 1, H-16, 2023

NDM-Kpn-96: *bla*_{NDM-1}, *bla*_{OXA-48}, *bla*_{CTX-M-15}, *ybt1*, *ICEKp4*, virulence score 1, H-16, 2023

NDM-Kpn-126: *bla*_{NDM-1}, *bla*_{OXA-48}, *bla*_{CTX-M-15}, *ybt1*, *ICEKp4*, virulence score 1, H-7, 2023

NDM-Kpn-113: *bla*_{NDM-1}, *bla*_{OXA-48}, *bla*_{CTX-M-15}, *ybt1*, *ICEKp4*, virulence score 1, H-7, 2023

NDM-Kpn-65: *bla*_{NDM-1}, *bla*_{OXA-48}, *bla*_{CTX-M-15}, *ybt10*, *ICEKp4*, virulence score 1, H-1, 2023

NDM-Kpn-103: *bla*_{NDM-1}, *bla*_{OXA-48}, *bla*_{CTX-M-15}, *ybt1*, *ICEKp4*, virulence score 1, H-1, 2023

NDM-Kpn-121: *bla*_{NDM-1}, *bla*_{OXA-48}, *bla*_{CTX-M-15}, *ybt1*, *ICEKp4*, virulence score 1, H-4, 2023

NDM-Kpn-82: *bla*_{NDM-1}, *bla*_{OXA-48}, *bla*_{CTX-M-15}, *ybt1*, *ICEKp4*, virulence score 1, H-5, 2023

B. CT3:

NDM-Kpn-123: *bla*_{NDM-1}, *bla*_{VIM-1}, *bla*_{CTX-M-15}, *ybt9*, *ICEKp3*, virulence score 1, H-2, 2023

NDM-Kpn-88: *bla*_{NDM-1}, *bla*_{VIM-1}, *bla*_{CTX-M-15}, *ybt9*, *ICEKp3*, virulence score 1, H-2, 2023

NDM-Kpn-116: *bla*_{NDM-1}, *bla*_{VIM-1}, *bla*_{CTX-M-15}, *ybt9*, *ICEKp3*, virulence score 1, H-7, 2023

NDM-Kpn-102: *bla*_{NDM-1}, *bla*_{VIM-1}, *bla*_{CTX-M-15}, *ybt9*, *ICEKp3*, virulence score 1, H-2, 2023

NDM-Kpn-49: *bla*_{NDM-1}, *bla*_{CTX-M-15}, *ybt9*, *ICEKp3*, virulence score 1, H-4, 2022

NDM-Kpn-87: *bla*_{NDM-1}, *bla*_{VIM-1}, *bla*_{CTX-M-15}, *ybt9*, *ICEKp3*, virulence score 1, H-2, 2023

NDM-Kpn-90: *bla*_{NDM-1}, *bla*_{VIM-1}, *bla*_{CTX-M-15}, *ybt9*, *ICEKp3*, virulence score 1, H-1, 2023

NDM-Kpn-93: *bla*_{NDM-1}, *bla*_{VIM-1}, *bla*_{CTX-M-15}, *ybt9*, *ICEKp3*, virulence score 1, H-1, 2023

NDM-Kpn-4: *bla*_{NDM-1}, *bla*_{CTX-M-15}, *ybt9*, *ICEKp3*, *iuc1*, *rmp1*, virulence score 4, H-3, 2019

NDM-Kpn-119: *bla*_{NDM-1}, *bla*_{CTX-M-15}, *ybt9*, *ICEKp3*, *iuc1*, *rmp1*, virulence score 4, H-18, 2023

NDM-Kpn-94: *bla*_{NDM-1}, *bla*_{CTX-M-15}, *ybt9*, *ICEKp3*, *iuc1*, *rmp1*, *KpVP-1*, virulence score 4, H-3, 2023

NDM-Kpn-21: *bla*_{NDM-1}, *bla*_{CTX-M-15}, *ybt9*, *ICEKp3*, *iuc1*, *rmp1*, *KpVP-1*, virulence score 4, H-5, 2021

NDM-Kpn-12: *bla*_{NDM-1}, *bla*_{CTX-M-15}, *ybt9*, *ICEKp3*, *iuc1*, *rmp1*, virulence score 4, H-8, 2020

NDM-Kpn-111: *bla*_{NDM-5}, *bla*_{CTX-M-15}, *ybt9*, *ICEKp3*, virulence score 1, H-9, 2023

NDM-Kpn-112: *bla*_{NDM-5}, *bla*_{CMY-2}, *bla*_{CTX-M-15}, *ybt9*, *ICEKp3*, *iuc1*, *rmp1*, *KpVP-1*, virulence score 4, H-7, 2023

NDM-Kpn-41: *bla*_{NDM-1}, *bla*_{CTX-M-15}, *ybt9*, *ICEKp3*, *iuc1*, *rmp1*, *KpVP-1*, virulence score 4, H-2, 2022

NDM-Kpn-31: *bla*_{NDM-1}, *bla*_{CTX-M-15}, *ybt9*, *ICEKp3*, *iuc1*, *rmp1*, *KpVP-1*, virulence score 4, H-1, 2021

NDM-Kpn-67: *bla*_{NDM-1}, *bla*_{CTX-M-15}, *ybt9*, *ICEKp3*, *iuc1*, *rmp1*, *KpVP-1*, virulence score 4, H-7, 2023

NDM-Kpn-75: *bla*_{NDM-1}, *bla*_{CTX-M-15}, *ybt9*, *ICEKp3*, virulence score 1, H-1, 2023

NDM-Kpn-61: *bla*_{NDM-1}, *bla*_{CTX-M-15}, *ybt9*, *ICEKp3*, *iuc1*, *rmp1*, *KpVP-1*, virulence score 4, H-8, 2023

NDM-Kpn-86: *bla*_{NDM-1}, *bla*_{CTX-M-15}, *ybt9*, *ICEKp3*, *iuc1*, *rmp1*, *KpVP-1*, virulence score 4, H-4, 2023

NDM-Kpn-120: *bla*_{NDM-1}, *bla*_{CTX-M-15}, *ybt9*, *ICEKp3*, *iuc1*, *rmp1*, *KpVP-1*, virulence score 4, H-1, 2023

NDM-Kpn-60: *bla*_{NDM-1}, *bla*_{CTX-M-15}, *ybt9*, *ICEKp3*, *iuc1*, *rmp1*, *KpVP-1*, virulence score 4, H-11, 2023

NDM-Kpn-59: *bla*_{NDM-1}, *bla*_{CTX-M-15}, *ybt9*, *ICEKp3*, *iuc1*, *rmp1*, *KpVP-1*, virulence score 4, H-12, 2023

NDM-Kpn-66: *bla*_{NDM-1}, *bla*_{CTX-M-15}, *ybt10*, *ICEKp4*, virulence score 1, H-1, 2023

NDM-Kpn-69: *bla*_{NDM-1}, *bla*_{CTX-M-15}, *ybt9*, *ICEKp3*, *iuc1*, *rmp1*, *KpVP-1*, virulence score 4, H-7, 2023

NDM-Kpn-68: *bla*_{NDM-1}, *bla*_{CTX-M-1}, *ybt9*, *ICEKp3*, *iuc1*, *rmp1*, *KpVP-1*, virulence score 4, H-5, 2023

NDM-Kpn-81: *bla*_{NDM-1}, *bla*_{CTX-M-15}, *ybt9*, *ICEKp3*, *iuc1*, *rmp1*, *KpVP-1*, virulence score 4, H-17, 2023

C. CT10:

NDM-Kpn-115: *bla*_{NDM-1}, *bla*_{CTX-M-15}, *ybt15*, *ICEKp11*, virulence score 1, H-7, 2023

NDM-Kpn-118: *bla*_{NDM-1}, *bla*_{CTX-M-15}, *ybt15*, *ICEKp11*, virulence score 1, H-1, 2023

NDM-Kpn-37: *bla*_{NDM-1}, *bla*_{CTX-M-15}, *ybt15*, *ICEKp11*, virulence score 1, H-1, 2022

NDM-Kpn-73: *bla*_{NDM-1}, *bla*_{CTX-M-1}, *ybt15*, *ICEKp11*, virulence score 1, H-1, 2022

NDM-Kpn-28: *bla*_{NDM-1}, *bla*_{CTX-M-15}, *ybt15*, *ICEKp11*, virulence score 1, H-1, 2021

NDM-Kpn-36: *bla*_{NDM-1}, *bla*_{CTX-M-15}, *ybt15*, *ICEKp11*, virulence score 1, H-13, 2022

NDM-Kpn-43: *bla*_{NDM-1}, *bla*_{CTX-M-15}, *ybt15*, *ICEKp11*, virulence score 1, H-15, 2022

NDM-Kpn-42: *bla*_{NDM-1}, *bla*_{CTX-M-15}, *ybt15*, *ICEKp11*, virulence score 1, H-1, 2022

NDM-Kpn-104: *bla*_{NDM-1}, *bla*_{CTX-M-15}, *ybt15*, *ICEKp11*, virulence score 1, H-7, 2023

NDM-Kpn-63: *bla*_{NDM-1}, *bla*_{CTX-M-15}, *ybt15*, *ICEKp11*, virulence score 1, H-1, 2023

NDM-Kpn-106: *bla*_{NDM-1}, *bla*_{CTX-M-15}, *ybt15*, *ICEKp11*, virulence score 1, H-7, 2023

NDM-Kpn-109: *bla*_{NDM-1}, *bla*_{CTX-M-15}, *ybt15*, *ICEKp11*, virulence score 1, H-7, 2023

NDM-Kpn-110: *bla*_{NDM-1}, *bla*_{CTX-M-15}, *ybt15*, *ICEKp11*, virulence score 1, H-7, 2023

NDM-Kpn-114: *bla*_{NDM-1}, *bla*_{CTX-M-15}, *ybt15*, *ICEKp11*, virulence score 1, H-7, 2023

NDM-Kpn-125: *bla*_{NDM-1}, *bla*_{VIM-1}, *bla*_{CTX-M-15}, *ybt15*, *ICEKp11*, virulence score 1, H-7, 2023

NDM-Kpn-108: *bla*_{NDM-1}, *bla*_{CTX-M-15}, *ybt15*, *ICEKp11*, virulence score 1, H-7, 2023

NDM-Kpn-89: *bla*_{NDM-1}, *ybt15*, *ICEKp11*, virulence score 1, H-1, 2023

NDM-Kpn-99: *bla*_{NDM-1}, *bla*_{CTX-M-15}, *ybt15*, *ICEKp11*, virulence score 1, H-1, 2023

NDM-Kpn-98: *bla*_{NDM-1}, *bla*_{CTX-M-15}, *ybt15*, *ICEKp11*, virulence score 1, H-2, 2023

NDM-Kpn-22: *bla*_{NDM-1}, *bla*_{CTX-M-15}, *ybt15*, *ICEKp11*, virulence score 1, H-6, 2022

NDM-Kpn-70: *bla*_{NDM-1}, *bla*_{CTX-M-15}, *ybt15*, *ICEKp11*, virulence score 1, H-7, 2023

NDM-Kpn-84: *bla*_{NDM-1}, *bla*_{CTX-M-15}, *ybt15*, *ICEKp11*, virulence score 1, H-2, 2023

NDM-Kpn-1: *bla*_{NDM-1}, *ybt15*, *ICEKp11*, virulence score 1, H-4, 2019

NDM-Kpn-2: *bla*_{NDM-1}, *ybt15*, *ICEKp11*, virulence score 1, H-1, 2019

NDM-Kpn-62: *bla*_{NDM-1}, *bla*_{KPC-3}, *bla*_{CTX-M-15}, *ybt15*, *ICEKp11*, virulence score 1, H-8, 2023

¹CTs: Cluster types; ²H: Hospital