Supplementary Table 1. Crosswalk of NPC Morphology Typologies: 9-Category, 4-Category, and 2-Category Classifications.

This crosswalk provides an explicit correspondence between the present study's 9-category morphology scheme and the traditional 4-category and 2-category schemes, to facilitate comparative research and meta-analytic synthesis.

Present study category (imaging plane)	Corresponding traditional 4-category	Collapsed 2-category (conical vs. cylindrical)	Operational notes for mapping
Cylindrical (sagittal)	Cylindrical	Cylindrical	No pronounced taper along the canal length; relatively uniform caliber.
Cone (sagittal)	Funnel (conical-type)	Conical	Conical/tapered configuration; aligns most closely with the 'funnel' archetype in the 4-category scheme.
Funnel (sagittal)	Funnel	Conical	One end wider than the other with progressive taper; prototypical conical form.
Banana-shaped (sagittal)	Banana	Cylindrical or Conical (caliber-based)	Curvature per se does not determine the 2-category reduction; assign by caliber profile—uniform (cylindrical-type) vs. tapered (conical-type).
Hourglass-shaped (sagittal)	Hourglass	Cylindrical or Conical (caliber-based)	Mid-segment constriction ('isthmus'). Map to cylindrical-type if overall taper is symmetrical/minimal; map to conical-type when a dominant taper is present.
Tree-branch (sagittal)	Not represented in the traditional 4-category scheme	Cylindrical or Conical (based on main trunk)	Branching morphology without a classical counterpart. Reduce according to the primary trunk's caliber profile; annotate as 'branched' for transparency.
Single (coronal)	Not applicable (coronal configuration)	Not applicable	Coronal configuration reported descriptively; no direct sagittal-based counterpart.
Two-parallel (coronal)	Not applicable (coronal configuration)	Not applicable	Two parallel channels in the coronal plane; reported descriptively; not reducible to sagittal-based archetypes.
Y-shaped (coronal)	Not applicable (coronal configuration)	Not applicable	Bifurcating / Y configuration in the coronal plane; reported descriptively; no direct sagittal-based counterpart.

Note: The 2-category reduction prioritizes the canal's caliber profile (uniform vs. tapered). Curvature (e.g., banana-shaped) and branching (tree-branch) are annotated but do not alone determine the conical vs. cylindrical assignment.