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Peter Ebenfelt* (pebenfel@math.ucsd.edu), Department of Mathematics, University of California at San Diego, La Jolla, CA 92093, and **Linda Rothschild**. *Finite mappings of essentially finite CR manifolds*. Preliminary report.

We study algebraic and geometric properties of finite holomorphic mappings H of an essentially finite generic submanifold M in \mathbb{C}^N . We give geometric conditions that guarantee that the image $H(M)$ is a smooth submanifold of \mathbb{C}^N . We also give algebraic conditions on M such that if $H(M)$ is contained in a submanifold of the same dimension as M , then H is necessarily a biholomorphism. As an application of our results, we also give a necessary and sufficient condition for a finite formal mapping to be convergent. (Received February 21, 2005)