Abstract. In this paper we discuss meromorphic continuation of the resolvent and bounds on the number of resonances for *scattering manifolds*, a class of manifolds generalizing Euclidian n-space. Subject to the basic assumption of analyticity near infinity, we show that resolvent of the Laplacian has a meromorphic continuation to a conic neighborhood of the continuous spectrum. This involves a geometric interpretation of the complex scaling method in terms of deformations in the Grauert tube of the manifold. We then show that the number of resonances (poles of the meromorphic continuation of the resolvent) in a conic neighborhood of $\mathbb{R}_+$ of absolute value less than r^2 is $\mathcal{O}(r^n)$. Under the stronger assumption of global analyticity and hyperbolicity of the geodesic flow, we prove a finer, Weyl-type upper bound for the counting function for resonances in small neighborhoods of the real axis. This estimate has an exponent which involves the dimension of the trapped set of the geodesic flow.