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封面故事

地球环境快速变化，癌症的图谱也在悄然演化。全球气候变暖引发冰川融化、海平面上升、极端天气频发、空气与水质污染加剧等环境变化，不仅威胁自然生态系统的稳定，也对人类健康构成深远影响。空气污染、紫外线辐射、化学毒物暴露、营养获取不均、社会压力、病毒传播等环境因素，正在悄然重塑肿瘤的发生模式、区域分布、发病人群和疾病过程。

肿瘤的发生是多因素共同作用的结果，约95%的病例涉及基因—环境的互作。尽管仅有5%~10%的癌症源于遗传性突变，但环境因素会显著放大其致癌风险。大多数癌症（90%~95%）由后天体细胞突变引起，这些突变在外部与内部环境因素共同作用下，通过损伤DNA，影响原癌基因、抑癌基因及DNA修复基因，从而推动肿瘤的发生和发展。

本期封面传达出：环境肿瘤学正推动“以防为主”的癌症控制策略转型，从“疾病驱动”迈向“环境干预”导向。它不仅关注发病机制，更强调以科学证据支撑的早期筛查、个体化风险评估、环境治理与政策制定，为癌症的全周期管理提供新的路径。