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respect to cancer, increased risks have been reported for various cancer sites, including cancers of the pancreas, liver, stomach, bladder and lung. However, the majority of studies su er from methodological issues, the results are not consistent across studies, and overall, the evidence remains inadequate.

Spatial analysis in epidemiology can lead to valuable insights into the possible environmental causes of a disease [13]. We previously described the geographical variations in cancer incidence in Guadeloupe, and we found that some high-incidence areas were characterized by the presence of open land lls [14].

e aim of the present study was to explore associations between cancer incidence and proximity to land lls in Guadeloupe.

Materials and methods

Local context

Guadeloupe is a French territory of 1628 km^2 with a population of approximately 400,000 inhabitants. It is a multiethnic population with a majority of people of African descent. e three authorized open land lls operating between the beginning of the 1970s and the end of the 2000s were located at La Gabarre (37 ha), Saint-François (8.6 ha) and Baillif (7 ha). A distinctive feature of these land lls is that they are located in the immediate vicinity of dwellings, in particular the land ll at La Gabarre, which is located in an urban area. Until a change in regulation in 2008, land lls received not only municipal waste but also hazardous waste, including industrial waste, end-of-life vehicles, batteries and accumulators.

Cancer data

We analyzed data collected by the Guadeloupe general cancer registry. Since 2008, the registry continuously and exhaustively records all new cases of cancer occurring in persons residing in Guadeloupe, regardless of age at diagnosis. Several standardized items are systematically collected by the registry for all types of cancer: date of diagnosis, topographical and morphological codes of the International Classi cation of Diseases in Oncology (ICD-O3), and sociodemographic information (sex, date of birth, and exact address of residence at diagnosis). For breast cancer, patients' status for hormonal receptors is

West Indies. Since many lifestyle risk factors, such as smoking, alcohol consumption and diet, are associated with socioeconomic position, it is reasonable to assume that the adjustment for the deprivation index also provided, in an indirect way, some control of the main risk factors for cancer. is is supported by the consistency of the relationship between deprivation and cancer incidence [15] with the social distribution of cancer risk factors [45