Clear cell renal cell carcinoma (ccRCC) is the most common and most aggressive type of kidney cancer. Each year, over 5,000 people in Poland are diagnosed with this disease, and nearly half of them die from it. One of the main risk factors for ccRCC is obesity. Fat tissue that grows in excess in overweight people doesn't just store energy — it also releases many substances that can affect how cancer develops and grows. In our project, we will study small molecules called microRNAs, which are released by the fat tissue surrounding kidney tumours. We want to understand whether these molecules can make kidney cancer cells grow faster, move more easily, or avoid dying — all of which can make the disease more dangerous. Our preliminary data show that one of these microRNAs — called miR-181b-5p — is found at higher levels in fat near the tumour than in fat farther away. It also seems to help cancer cells migrate, which could promote tumour spread. We will study this molecule in detail and check whether its levels are linked to how advanced the cancer is. This research will help us better understand how fat tissue near the tumour influences kidney cancer. In the future, this knowledge could be used to develop better treatments for patients with this serious disease.