

# Early ovarian cancer quest

## Gene key to a cure

**BRIGID O'CONNELL**

MELBOURNE researchers are working to defeat a rare type of ovarian cancer that typically hits around puberty, but can strike before a girl's first birthday.

A team from the Hudson Institute of Medical Research is trying to unpick the genetic "spelling mistake" that allows granulosa cell tumours to develop, and consequently find the treatment needed to stop them returning.

Dr Simon Chu and his hormone cancer therapeutics research group are the only Australians researching this type of cancer, one that unusually grows from within the ovary and makes up about 5 per cent of ovarian cancer

cases.

They are focusing on making progress on a rare juvenile subtype of the cancer. While they are slow-growing, the genetic causes for what triggers juvenile granulosa cell tumours are unknown.

In 30 per cent of females the cancer returns, and they have a poor prognosis.

Dr Chu's team has collected tumour samples from 20 patients worldwide, to compare the genetics to healthy DNA samples from the same patient.

"In the adult form of the disease, there is a gene that we know in over 95 per cent of these women is mutated.

"So we're looking for that spelling mistake in the juvenile form which might indicate a gene mutation which caus-

es tumours to arise," Dr Chu said.

"If we can understand what causes these mutations to occur from the primary cancer to recurrence, then we can look out for them early and monitor these women more closely for that recurrent disease."

One of the tumour samples now being analysed belongs to Victorian girl Neve, who became the youngest Australian diagnosed with this juvenile ovarian cancer, at 11 months of age.

The tumour was the size of a softball when it was detected and it sent her into early puberty, which reversed itself once the tumour on her ovary was surgically removed.

Neve endured four months of chemotherapy.

Mum Jo said her daughter, now 8, would have annual blood tests and scans for the rest of her life.

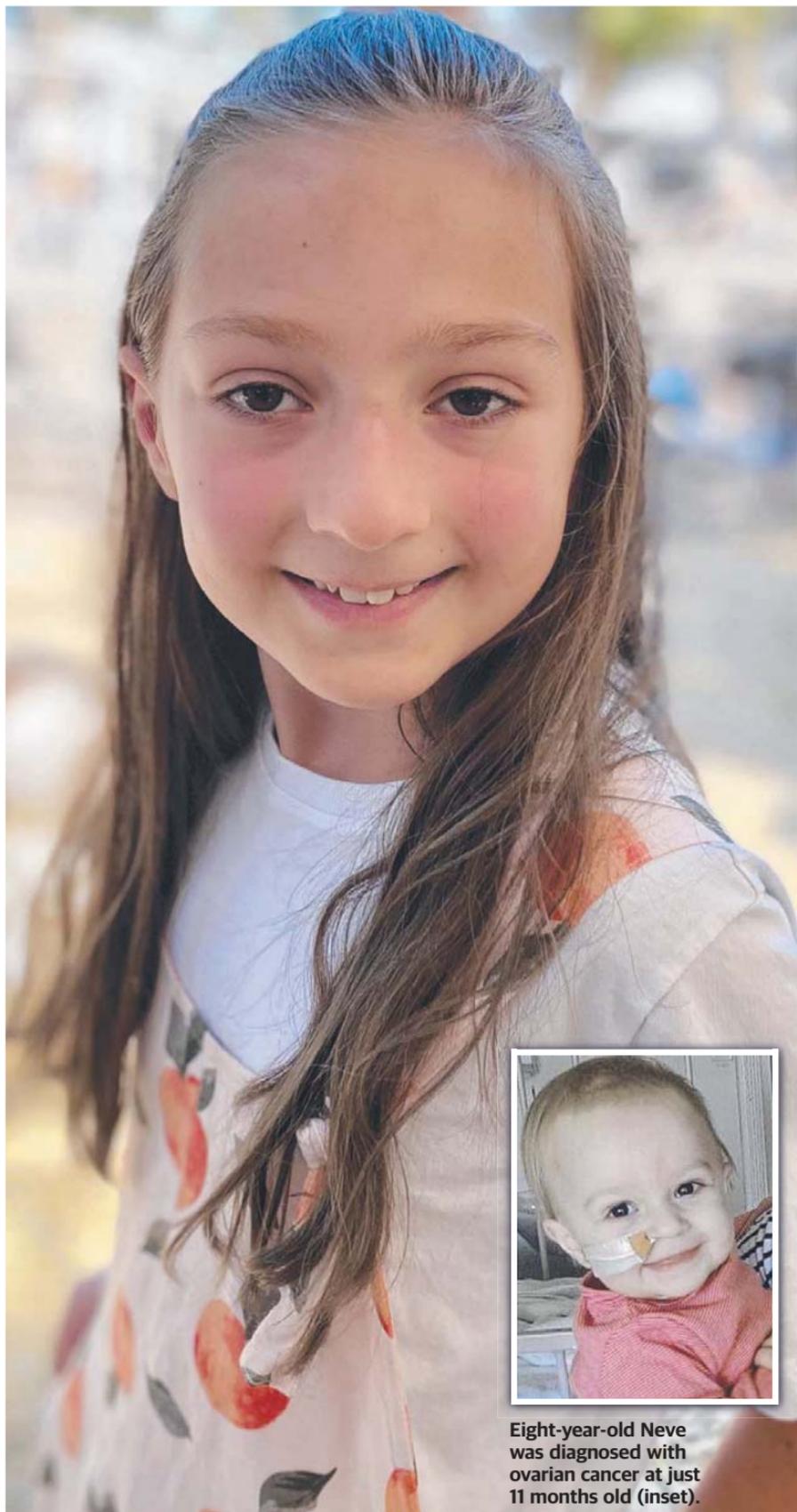
"Ultimately we want a cure, but we're really hopeful that other treatments will come along for this cancer, because you can only have so much chemo as the side-

effects of these treatments is more cancer," she said.

"We know she can't have children. In some cases even if you carry a child and it's not your egg, the hormones can

kick off the cancer again. But she can be a mum in other ways. I just want for her to have a happy and healthy life, and just have a chance."

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**Eight-year-old Neve was diagnosed with ovarian cancer at just 11 months old (inset).**