PTRUE (predicate as counter)

Initialise predicate-as-counter to all active

Set the destination predicate as all-active elements, using the predicate-as-counter encoding.

SVE2
(FEAT_SVE2p1)

31 30	29 28 27 26 25 24	23 22	21 20 19 18 17 16 15 14 13 12 11 10	9 8 7 6 5 4	3	2 1 0
0 0	1 0 0 1 0 1	size	1 0 0 0 0 0 0 1 1 1 1 0	0 0 0 0 0 1	0	PNd

```
      PTRUE  <PNd>.<T>
```

```
    if !HaveSME2() && !HaveSVE2p1() then UNDEFINED;
    constant integer esize = 8 << UInt(size);
    integer d = UInt('1':PNd);
```

Assembler Symbols

<PNd>   Is the name of the destination scalable predicate register PN8-PN15, with predicate-as-counter encoding, encoded in the "PNd" field.

<T>   Is the size specifier, encoded in "size":

size	<T>
00	B
01	H
10	S
11	D

Operation

```
    if HaveSVE2p1() then CheckSVEEnabled(); else CheckStreamingSVEEnabled()
    constant integer VL = CurrentVL;
    constant integer PL = VL DIV 8;
    constant integer elements = VL DIV esize;
    bits(PL) result = EncodePredCount(esize, elements, elements, FALSE, PL)
    P[d, PL] = result;
```

Operational information

If PSTATE.DIT is 1:

- The execution time of this instruction is independent of:
  - The values of the data supplied in any of its registers.
  - The values of the NZCV flags.

- The response of this instruction to asynchronous exceptions does not vary based on:
  - The values of the data supplied in any of its registers.
  - The values of the NZCV flags.