Determining your ANC (Absolute Neutrophil Count)

A Complete Blood Count (**CBC**) also known as a Full Blood Count (**FBC**) measures the levels of the three basic blood cells-white cells, red cells, and platelets.
An **ANC** (Absolute Neutrophil Count) measures the percentage of neutrophils (shown in this listing as Polys) in your white blood count.
multiply your white blood count (WBC) x total neutrophils (segmented neutrophils% + segmented bands%) x 10 = ANC.
A normal ANC is over 1,000. An ANC of 500-1,000 is considered neutropenic and the Registry considers that an individual whose ANC is chronically less than 500 has Severe Chronic Neutropenia.

Result column: shows counts that fall within the normal range.
Flag column (this marks items that are out of range): shows counts that are lower ("L") or higher ("H") than the normal range.

White blood cells: help protect you from infection. For this patient, the total white cell count is 2.0, which is low.

Reference Interval (or Reference Range) column: shows the normal range for each measurement. Different labs may use different ranges, your test results may be slightly different, depending on where your results are processed.

Red Blood Cells: Carry oxygen from your lungs to the rest of your body.

Hemoglobin (Hb or Hgb): the part of the red cell that carries the oxygen.

Hematocrit (HCT), is a measure of the amount of red blood cells in the blood.

Platelets: the cells that form blood clots that stop bleeding. The platelet count for this patient is normal.

Polys (also known as segs, segmented neutrophils, neutrophils, granulocytes) are the most numerous of our white blood cells. These are the first line of defense against infection, killing invaders of the body.

Bands (also known as stabs, segs or segmented bands) are immature polys. They also function to kill invaders of the body.

Lymphs or lymphocytes are white blood cells which assist in building immunity and include B and T cells.

Monocytes, **eosinophils**, and **basophils** destroy invading bacteria and viruses.

Differential: part of the CBC that shows counts for the five main kinds of white cells, either as percentages (the first 6 counts), or as the number of cells (the second 6 counts). This patient has a lower than normal **poly** count and a higher than normal **lymph** and **monocyte** count.

Test	Result	Flag	Units	Reference Interval
CBC WITH DIFFERENTIAL				
White Blood Count		2.0L	x $10^3/\mu L$	4.8-10.8
Red Blood Count		4.34L	x $10^6/\mu L$	4.70-6.10
Hemoglobin		13.2L	g/dL	14.0-18.0
Hematocrit		37.5L	%	42.0-52.0
Platelets	278		x $10^3/\mu L$	130-400
Polys		14.8L	%	43.0-65.0
Bands	5		%	
Lymphocytes		55.5H	%	20.5-45.5
Monocytes		22H	%	5.5-11.7
Eosinophils	1.7		%	0.9-2.9
Basophils	1.0		%	0.2-1.0
Atypical lymphs	0.0		%	0.0-2.0
Polys (absolute)		0.3L	x $10^3/\mu L$	2.2-4.8
Bands (absolute)	0.1		x $10^3/\mu L$	
Lymphs (absolute)		1.1L	x $10^3/\mu L$	1.3-2.9
Monocytes (absolute)	0.4		x $10^3/\mu L$	0.3-0.8
Eosinophils (absolute)	0.0		x $10^3/\mu L$	0.0-0.2
Basophils (absolute)	0.0		x $10^3/\mu L$	0.0-0.1
Atypical lymphs (absolute)	0.0		x $10^3/\mu L$	0.0-2.0

To determine your ANC:

1. Find the WBC, the polys and bands on your CBC.
WBC 2.0
Polys 14.8%
Bands 5%
2. Add the polys and bands.
(14.8 + 5 = 19.8)
3. Multiply the sum of the polys and bands by the WBC.
19.8 x 2.0 = 39.6
4. Multiply the product by 10.
39.6 x 10 = 396

This person has an ANC of 396

To calculate the ANC from absolute numbers the formula is:
Absolute polys + Absolute bands multiplied by 1000 = ANC
(0.3 + 0.1) x 1000 = 400