```
If SOO is Null # row 2
    report, skip, continue

if TAR/GT # rows 4/5a
    if MCL is null or PCL is null
        report, skip, continue

if EM # rows 4/5b
    if MCL not null or PCL not null # if there is one check there is both
        if not (MCL not null and PCL not null) # must have both
            report, skip, contine

If not(TAR/GT/EM) # rows 7/8
    if MCL or PCL
        report, skip, continue

If TAR/GT/EM
    if MCL not(null/NS)
        if verifies
            if PCL not(null/NS/OSN):# row 10
                use input values for MCL, PCL, SOO, and use the corresponding Derivation.
                continue
            if PCL NS # row 12
                use input value for MCL, for PCL,
                if SOO is either "129" or "129S/SvEv"
                    use corresponding "Not Specified" PCL (_cellline_keys 1098, 40245)
                    and corresponding Derivation for Allele Type.
                    continue
                else # if SOO is any other strain,
                    then for PCL use generic "Not Specified" (cellline key = -1)
                    and corresponding Derivation for Allele Type.
                    continue
            else
                report, skip, continue
            if PCL OSN # row 13
                if not (general note)
                    report, skip, continue
                if verifies
                    use input value for MCL
                    if SOO is either "129" or "129P2/OlaHsd" or "129S5/SvEvBrd"
                        use corresponding "Other (see notes)" PCL (_cellline_keys 1101, 40248, 40255),
                        and corresponding Derivation for Allele Type.
                        continue
                    else # If SOO is any other strain
                        then for PCL use generic "Other (see notes)" (cellline key = 1069)
                        and corresponding Derivation for Allele Type.
                        continue
                else
                    report, skip, continue
    if MCL NS
        if verifies
            if PCL not(null/NS/OSN)
                create new "Not Specified" MCL for the matched PCL,
                use corresponding Derivation, and use input SOO for the allele
                continue
            if PCL NS
                create new "Not Specified" MCL
                if SOO is either "129" or "129S/SvEv"
                    use corresponding "Not Specified" PCL (_cellline_keys 1098, 40245), and corresponding Derivation for
Allele Type.
                    continue
                else # If SOO is any other strain,
                    then for PCL use generic "Not Specified" (cellline key = -1) and corresponding Derivation for Allele
Type.
                    continue
            if PCL OSN
                if not (general note)
                    report, skip, continue
                else
                    create new "Not Specified" MCL,
                    if SOO is either "129" or "129P2/OlaHsd" or "129S5/SvEvBrd"
                        use corresponding "Other (see notes)" PCL (_cellline_keys 1101, 40248, 40255)
                        and corresponding Derivation for Allele Type.
                        continue
                    else # If SOO is any other strain,
                        then for PCL use generic "Other (see notes)" (cellline key = 1069)
                        and corresponding Derivation for Allele Type.
```

```
                        continue
else # Not TAR/GT
    if verifies
        use input SOO for Allele SOO.
        there is no MCL
```