PRIMARY ADRENAL INSUFFICIENCY IN YOUNG BOYS IS A RED FLAG FOR ALD

The majority of cases of antibody-negative primary adrenal insufficiency in young boys are caused by adrenoleukodystrophy (ALD)\(^1\)\(^-\)\(^3\)

ALD is a rare X-linked recessive disorder resulting from mutations in the ABCD1 gene\(^3\). The early symptoms of ALD are similar to other medical conditions, making diagnosis challenging\(^4\)

ALD may develop into cerebral ALD (CALD), a severe form of the disease\(^4,\)\(^5\)

If untreated, CALD often leads to severe neurodegeneration and sometimes death within 2 to 3 years\(^5\)

EARLY DIAGNOSIS OF ALD COULD SAVE A LIFE

If CALD is caught early, lifesaving treatment is possible\(^6\)

*Early detection is critical*

CHECK VERY LONG CHAIN FATTY ACID LEVELS (VLCFA)

A simple VLCFA blood test can diagnose ALD\(^4\)

*See the back of this card for more information*

SOME FACTS ABOUT ALD

- 85% of young boys diagnosed with ALD also had primary adrenal insufficiency\(^8\)
- Occurs in about 1 in 20,000 males\(^3\)
- Causes impaired peroxisomal β-oxidation of VLCFA, resulting in accumulation of VLCFA in plasma and all tissues\(^3\)
- Early symptoms are variable and non-specific but may include behavioral or learning issues and audiovisual impairment\(^3,\)\(^4\)
- Clinical manifestation of ALD varies widely, even among members of the same family. Patients may exhibit any or all of a spectrum of phenotypes, including adrenal insufficiency, adrenomyeloneuropathy (AMN) affecting the peripheral nervous system in adults, and/or the rapidly progressive cerebral form (CALD)\(^1,\)\(^7\)
ABOUT 35-40% OF ALD CASES WILL CONVERT TO CALD\textsuperscript{4}

• CALD leads to progressive behavioral, cognitive, and neurologic deficits and, in most patients, total disability and death within 2 to 3 years\textsuperscript{4,5}

• Symptoms generally present between ages 4 and 8\textsuperscript{4}

• CALD can be successfully treated with allogeneic haematopoietic cell transplantation, \textit{but only if diagnosed in its earliest stages}\textsuperscript{6}

A SIMPLE BLOOD TEST CAN MAKE ALL THE DIFFERENCE

• Boys with antibody-negative primary adrenal insufficiency who test negative for 21-hydroxylase antibody should be assessed for ALD by a VLCFA assay\textsuperscript{9}

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<tr>
<td><strong>CPT code</strong></td>
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Codes and information obtained from Quest Diagnostics in the US. Please apply different country- and/or laboratory-specific information as appropriate.

THE VLCFA ASSAY CAN DIAGNOSE ALD IN MOST AFFECTED BOYS

• If you suspect ALD, order a VLCFA test and refer the patient to a pediatric neurologist

\checkmark \textbf{WHEN YOU SEE ANTIBODY-NEGATIVE PRIMARY ADRENAL INSUFFICIENCY—CHECK FOR ALD}

Additional information on ALD and its symptoms and treatment is available at ALDConnect.org.