

Supplementary Information: Phenylalanine metabolism and tetrahydrobiopterin bio-availability in COVID-19 and HIV

Table S1. All correlations output

| Group | x | r | p | r.1 | FDRp |
|-------------------|------------|---------------|--------|-----------|--------|
| - | - | - | | | |
| All COVID HIV- | ROX.Severe | Valine | 0.1274 | 0.21 | 0.3575 |
| All COVID HIV+ | ROX.Severe | Valine | 0.7452 | -0.1 | 0.8675 |
| All COVID HIV- | ROX.Severe | Isoleucine | 0.2233 | 0.17 | 0.5098 |
| All COVID HIV+ | ROX.Severe | Isoleucine | 0.1882 | - 0.37 | 0.4753 |
| All COVID HIV- | ROX.Severe | Leucine | 0.1296 | 0.21 | 0.3575 |
| All COVID HIV+ | ROX.Severe | Leucine | 0.4336 | - 0.23 | 0.7134 |
| All COVID HIV- | ROX.Severe | Tyrosine | 0.0434 | 0.28 | 0.1715 |
| All COVID HIV+ | ROX.Severe | Tyrosine | 0.4846 | -0.2 | 0.7604 |
| All COVID HIV- | ROX.Severe | Phenylalanine | 0.0073 | 0.37 | 0.0368 |
| All COVID HIV+ | ROX.Severe | Phenylalanine | 0.5028 | 0.2 | 0.7632 |
| All COVID HIV- | ROX.Severe | KA | 0.0607 | - 0.26 | 0.2128 |
| All COVID HIV+ | ROX.Severe | KA | 0.3449 | - 0.27 | 0.6154 |
| All COVID HIV- | ROX.Severe | Tryptophane | 0.2409 | - 0.17 | 0.5098 |
| All COVID HIV+ | ROX.Severe | Tryptophane | 0.1985 | 0.37 | 0.4753 |
| All COVID HIV- | ROX.Severe | Fischers | 0.1211 | - 0.22 | 0.3554 |
| All COVID HIV+ | ROX.Severe | Fischers | 0.5593 | - 0.17 | 0.8079 |
| All COVID HIV- | ROX.Severe | Phe:Tyr | 0.096 | 0.23 | 0.2963 |
| All COVID HIV+ | ROX.Severe | Phe:Tyr | 0.0631 | 0.51 | 0.2128 |
| All COVID HIV- | Valine | Isoleucine | 0 | 0.9 | 0 |

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|----------------|------------|---------------|--------|-----------|--------|
| All COVID HIV+ | Valine | Isoleucine | 0 | 0.93 | 0 |
| All COVID HIV- | Valine | Leucine | 0 | 0.95 | 0 |
| All COVID HIV+ | Valine | Leucine | 0 | 0.9 | 0.0001 |
| All COVID HIV- | Valine | Tyrosine | 0.0009 | 0.45 | 0.0065 |
| All COVID HIV+ | Valine | Tyrosine | 0.2328 | - 0.34 | 0.5098 |
| All COVID HIV- | Valine | Phenylalanine | 0.0898 | 0.24 | 0.2918 |
| All COVID HIV+ | Valine | Phenylalanine | 0.926 | 0.03 | 0.9685 |
| All COVID HIV- | Valine | KA | 0.9564 | - 0.01 | 0.9779 |
| All COVID HIV+ | Valine | KA | 0.6443 | - 0.14 | 0.8222 |
| All COVID HIV- | Valine | Tryptophane | 0.7247 | - 0.05 | 0.8675 |
| All COVID HIV+ | Valine | Tryptophane | 0.871 | - 0.05 | 0.9325 |
| All COVID HIV- | Valine | Fischers | 0.0035 | 0.4 | 0.0189 |
| All COVID HIV+ | Valine | Fischers | 0.0028 | 0.73 | 0.0162 |
| All COVID HIV- | Valine | Phe:Tyr | 0.3258 | - 0.14 | 0.5929 |
| All COVID HIV+ | Valine | Phe:Tyr | 0.2791 | 0.31 | 0.5521 |
| All COVID HIV- | Isoleucine | Leucine | 0 | 0.93 | 0 |
| All COVID HIV+ | Isoleucine | Leucine | 0 | 0.92 | 0.0001 |
| All COVID HIV- | Isoleucine | Tyrosine | 0.0614 | 0.26 | 0.2128 |
| All COVID HIV+ | Isoleucine | Tyrosine | 0.3736 | - 0.26 | 0.6538 |
| All COVID HIV- | Isoleucine | Phenylalanine | 0.2403 | 0.17 | 0.5098 |
| All COVID HIV+ | Isoleucine | Phenylalanine | 0.7123 | - 0.11 | 0.8642 |
| All COVID HIV- | Isoleucine | KA | 0.5032 | - 0.09 | 0.7632 |
| All COVID HIV+ | Isoleucine | KA | 0.6506 | 0.13 | 0.8222 |

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|-------------------|------------|---------------|--------|-----------|--------|
| All COVID HIV- | Isoleucine | Tryptophane | 0.6441 | - 0.07 | 0.8222 |
| All COVID HIV+ | Isoleucine | Tryptophane | 0.5766 | - 0.16 | 0.8199 |
| All COVID HIV- | Isoleucine | Fischers | 0.0001 | 0.5 | 0.0013 |
| All COVID HIV+ | Isoleucine | Fischers | 0.0028 | 0.73 | 0.0162 |
| All COVID HIV- | Isoleucine | Phe:Tyr | 0.5877 | - 0.08 | 0.8203 |
| All COVID HIV+ | Isoleucine | Phe:Tyr | 0.8053 | 0.07 | 0.8937 |
| All COVID HIV- | Leucine | Tyrosine | 0.0096 | 0.36 | 0.0437 |
| All COVID HIV+ | Leucine | Tyrosine | 0.3016 | -0.3 | 0.5601 |
| All COVID HIV- | Leucine | Phenylalanine | 0.142 | 0.21 | 0.3802 |
| All COVID HIV+ | Leucine | Phenylalanine | 0.9806 | 0.01 | 0.9915 |
| All COVID HIV- | Leucine | KA | 0.613 | - 0.07 | 0.8203 |
| All COVID HIV+ | Leucine | KA | 0.8581 | 0.05 | 0.9296 |
| All COVID HIV- | Leucine | Tryptophane | 0.4845 | -0.1 | 0.7604 |
| All COVID HIV+ | Leucine | Tryptophane | 0.5979 | - 0.15 | 0.8203 |
| All COVID HIV- | Leucine | Fischers | 0.0008 | 0.45 | 0.0058 |
| All COVID HIV+ | Leucine | Fischers | 0.0088 | 0.67 | 0.0424 |
| All COVID HIV- | Leucine | Phe:Tyr | 0.6118 | - 0.07 | 0.8203 |
| All COVID HIV+ | Leucine | Phe:Tyr | 0.439 | 0.23 | 0.7134 |
| All COVID HIV- | Tyrosine | Phenylalanine | 0 | 0.59 | 0.0001 |
| All COVID HIV+ | Tyrosine | Phenylalanine | 0.0525 | 0.53 | 0.1991 |
| All COVID HIV- | Tyrosine | KA | 0.7112 | 0.05 | 0.8642 |
| All COVID HIV+ | Tyrosine | KA | 0.268 | 0.32 | 0.5419 |
| All COVID HIV- | Tyrosine | Tryptophane | 0.8375 | 0.03 | 0.9183 |

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|----------------|---------------|-------------|--------|-------|--------|
| All COVID HIV+ | Tyrosine | Tryptophane | 0.5455 | 0.18 | 0.8079 |
| All COVID HIV- | Tyrosine | Fischers | 0.0002 | -0.5 | 0.0014 |
| All COVID HIV+ | Tyrosine | Fischers | 0.0259 | -0.59 | 0.1072 |
| All COVID HIV- | Tyrosine | Phe:Tyr | 0.1804 | -0.19 | 0.4691 |
| All COVID HIV+ | Tyrosine | Phe:Tyr | 0.6326 | -0.14 | 0.8222 |
| All COVID HIV- | Phenylalanine | KA | 0.5581 | -0.08 | 0.8079 |
| All COVID HIV+ | Phenylalanine | KA | 0.7761 | -0.08 | 0.8828 |
| All COVID HIV- | Phenylalanine | Tryptophane | 0.3834 | 0.12 | 0.6583 |
| All COVID HIV+ | Phenylalanine | Tryptophane | 0.3998 | 0.24 | 0.6737 |
| All COVID HIV- | Phenylalanine | Fischers | 0 | -0.61 | 0 |
| All COVID HIV+ | Phenylalanine | Fischers | 0.0977 | -0.46 | 0.2963 |
| All COVID HIV- | Phenylalanine | Phe:Tyr | 0 | 0.63 | 0 |
| All COVID HIV+ | Phenylalanine | Phe:Tyr | 0.0027 | 0.74 | 0.0162 |
| All COVID HIV- | KA | Tryptophane | 0.2319 | 0.17 | 0.5098 |
| All COVID HIV+ | KA | Tryptophane | 0.9411 | -0.02 | 0.9732 |
| All COVID HIV- | KA | Fischers | 0.7997 | -0.04 | 0.8937 |
| All COVID HIV+ | KA | Fischers | 0.6993 | -0.11 | 0.8642 |
| All COVID HIV- | KA | Phe:Tyr | 0.1956 | -0.18 | 0.4753 |
| All COVID HIV+ | KA | Phe:Tyr | 0.2966 | -0.3 | 0.5601 |
| All COVID HIV- | Tryptophane | Fischers | 0.2502 | -0.16 | 0.5175 |
| All COVID HIV+ | Tryptophane | Fischers | 0.7531 | -0.09 | 0.8675 |
| All COVID HIV- | Tryptophane | Phe:Tyr | 0.7512 | 0.05 | 0.8675 |
| All COVID HIV+ | Tryptophane | Phe:Tyr | 0.2926 | 0.3 | 0.5601 |

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|-------------------|----------|---------|--------|-----------|--------|
| All COVID HIV- | Fischers | Phe:Tyr | 0.0232 | - 0.31 | 0.1007 |
| All COVID HIV+ | Fischers | Phe:Tyr | 0.9222 | - 0.03 | 0.9685 |