

Additional file 7

Table S7: Generated fungus name in the second task for chemical compound equals

Verrucarin A

Prompt	GPT-2	GPT-3	GPT-neo	Bloom	BioGPT	BioGPT-Large	Galactica	ChatGPT	GPT-4
Question: Which fungus produces Verrucarin A ?	X	X	X	X	X	X	Aspergillus	X	X
Answer:									
Verrucarin A is produced by		<i>Verrucaria nigrescens</i>			<i>Aspergillus niger</i>	<i>Penicillium verrucosum</i>	X	<i>Myrothecium verrucaria</i>	<i>Myrothecium verrucaria</i>
Verrucarin A is produced by the fungus		<i>Verrucaria nigrescens</i>		<i>Penicillium expansum</i>	<i>Aspergillus niger</i>	<i>Penicillium verrucosum</i>	X	<i>Myrothecium verrucaria</i>	<i>Myrothecium verrucaria</i>
Verrucarin A is produced by fungi		<i>Verrucaria</i>	<i>Neurospora crassa</i>			<i>Penicillium</i>	X	<i>Myrothecium verrucaria</i> , <i>Stachybotrys chartarum</i> , <i>Fusarium oxysporum</i> , <i>Alternaria alternata</i>	<i>Myrothecium verrucaria</i>
Verrucarin A is produced by fungi, such as		<i>Verrucaria nigrescens</i>	<i>Penicillium roqueforti</i> , <i>Penicillium verrucarinum</i>		<i>Aspergillus terreus</i>	<i>Penicillium verrucosum</i>	X	<i>Myrothecium verrucaria</i>	<i>Myrothecium verrucaria</i>
Verrucarin A is isolated from		<i>Verrucaria maura</i>				<i>Penicillium verrucosum</i>	X	<i>Myrothecium verrucaria</i>	<i>Myrothecium verrucaria</i>
Verrucarin A originally isolated from		<i>Verrucaria nigrescens</i>				<i>Penicillium verrucosum</i>	X	<i>Myrothecium verrucaria</i>	<i>Myrothecium verrucaria</i>
Verrucarin A is isolated from the fungus		<i>Verrucaria nigrescens</i>		<i>Penicillium expansum</i>	<i>Aspergillus versicolor</i>	<i>Penicillium verrucosum</i>	X	<i>Myrothecium verrucaria</i>	<i>Myrothecium verrucaria</i>
Verrucarin A is isolated from fungi		<i>Verrucaria</i>			<i>Aspergillus</i>		X	<i>Myrothecium verrucaria</i> , <i>Stachybotrys chartarum</i> , <i>Fusarium oxysporum</i> , <i>Alternaria alternata</i>	<i>Myrothecium verrucaria</i>
Verrucarin A is isolated from fungi, such as		<i>Verrucaria maura</i>	<i>Conchocalyx irregularis</i> , <i>Aspergillus ochraceus</i> , <i>Stachybotrys chartarum</i>		<i>Aspergillus terreus</i>	<i>Penicillium verrucosum</i>	X	<i>Myrothecium verrucaria</i>	<i>Myrothecium verrucaria</i>
Verrucarin A is a natural product found in		<i>Verrucaria</i>				<i>Penicillium verrucosum</i>	X	<i>Myrothecium</i>	<i>Myrothecium</i>
Verrucarin A is a natural chemical compound found in		<i>Verrucaria</i>				<i>Penicillium verrucosum</i>	X	<i>Myrothecium</i>	<i>Myrothecium</i>

Generated fungus name in the *chemical-fungus relation determination via entity generation*

task for one chemical compound equals *Verrucarin A* for 11 prompts (P8-P18) (for Galactica

model only P19 prompt). Bold generated fungus names that are correct.